GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

August 29, 2003, 14:14:49; Search time 24 Seconds (without alignments) 21.554 Million cell updates/sec Run on:

US-09-845-726A-1_COPY_2_12 58 1 AHKSEVAHRFK 11

Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

127863 seqs, 47026705 residues Searched:

127863 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_41:* Database : Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	8	0 rattu	2 macaca mula	0 meriones un	9 bos taurus	5 oryctolagus		7 equus cabal	6	4 felis silve		1 gallus gall			3 mus musculu	6 saccharomyc	9 archaeoglob			2 mus musculu		6 campylobact	2 mycobacteri		1 mycoplasma		3 capra hircu		8 clostridium	l avian adeno			7 escherichia
	sscr	P0276	P0277	028522	032090	P0276	P4906	P0772	P35747	P1463	P4906	883	912	P81188	P4982	Q8r4x3	374	028359	09by 32	041479	09jm52	Q8n4c8	09pms6	032912	1271	P75091	P00189	915	Q8r9t6	08xj18	475	P53552	138	6827
	ğ	M	Ъ.	ö	ö	ď	Ь	ы	Ε,	E	Ь	ы	딦	P.	P4	ö	Ľ,	8	õ	0	õ	ä	õ	8	Б.	P7	Ы	P7	ö	ö	ğ	PS	Ы	04
SUMMARIES	QΙ	ALBU	ALBU				ALBU_RABIT				-	-				RBMC_MOUSE	FRE4_YEAST			CATV		M4K6												YQFA_ECOLI
	DB							-				•				Н	Т					7												1
	Length	609	909	009	609	607	909	809	607	607	608	605	615	40	909	1002	719	155	194	324	1308	1332	200	478	488	512	250	520	625	685	1121	1597	185	219
æ	Ouery Match	100.0	98.3	93.1	93.1	91.4	89.7	84.5	82.8	85.8	82.8	81.0	77.6	75.9	74.1	.63:8	62.1	60.3	60.3	60.3	60.3	60.3	58.6	58.6	58.6	28.6	58.6	58.6	58.6	58.6	58.6	28,6	56.9	56.9
	Score	28	57	54	54	23	52	49	48	48	48	47	45	44	43	37	36	32	35	35	35	35		34					34			34	33	33
	Result No.	-	7	e	4	S	9	7	œ	6	10	11	12	13	14	15	16	17	18	19	20	. 21	22	23	24	25	26	27	28	29	30	31	32	33

035723 mus musculu P47150 saccharomyc 000214 homo sapien Q9115 mus musculu 062665 rattus norv 008447 mycobacteri Q43116 ricinus com P34266 caenorhabdi Q01262 pseudomonas P37894 caulobacter Q64566 rattus norv Q9sjb3 arabidopsis	
DJB3_MOUSE YJB3_YEAST LEGGHUMAN LEGGHUMAN C13A_MYCTU PDI_RICCO YKF3_CAEEL HYUA_PSESN PLEC_CAUCR ATC1_RAT PMAS_ARATH	
наннаннанна	
ииииии 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	

ALIGNMENTS

O TRIBUDATION .	ALBU_LUMAN STANDARD; PRT; 609 AA. ALC ALBU_LUMAN STANDARD; PRT; 609 AA. AC P02768; 095574; Q13140; Q9P157; Q9P117; Q9UHS3; Q9UJZ0; DT 21-JUT-1986 (Rel. 01, Created) DT 01-APR-1990 (Rel. 14, Last sequence update) DT 15-SEP-2003 (Rel. 42, Last annotation update) DE Serum albumin precursor.	OS Homo sapiens (Human). OS Homo sapiens (Human). OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. OX NCBI_TaxID=9606; RN [1] RP SEQUENCE FROM N.A.			13 15 15 15 15 15 15 15	
-----------------	--	---	--	--	---------------------------------------	--

```
TISSUE-Liver, and Skeletal muscle;

X MEDLINE-22388257; PubMed-12477932;

Strausberg R.L., Faligold E.A., Grouse L.H., Derge J.G.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaffer C.R., Schuler G.D.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaffer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarane P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

Riting M., Madan A., Young A.C., Shevohenko Y., Bouffard G.G.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Rutterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Ruman and mouse cobn Sequences.",

Prop. Natl A. Natland A., Yones S.J.M., Marra M.A.;

Prop. Natland A., Soles R.M., Marra M.A.;

Ruman and mouse cobn Sequences.",

Prop. Natland A., Natland A., Roch A., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The chemistry and physiology of the human plasma proteins, pp.23-40,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Urano Y., Watanabe K., Sakai M., Tamaoki T.;
"The human albumin gene. Characterization of the 5' and 3' flanking regions and the polymorphic gene transcripts.";
J. Biol. Chem. 261:3244-3251(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-55203287; Pubmed-7895732;
Corbett J.M., Wheeler C.H., Baker C.S., Yacoub M.H., Dunn M.J.;
The human myocardial two-dimensional gel protein database: update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Lysine residue 240 of human serum albumin is involved in high-affinity binding of bilirubin.";
Blochem. J. 171:453-459(1978).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Walker J.E.;
"Lysine residue 199 of human serum albumin is modified by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Menaya J., Parrilla R., Ayuso M.S.;
Submitted (MAR-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-76187907; PubMed-1225573; Meloun B., Moravek L., Kostka V.; "Complete amino acid sequence of human serum albumin."; FEBS Lett. 58:134-137(1975).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Saber M.A., Stockbauer P., Moravek L., Meloun B., "Disulfide bonds in human serum albumin."; Collect. Czech. Chem. Commun. 42:564-579(1977).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Brown J.R., Shockley P., Behrens P.Q.;
(In) Bing D.H. (eds.);
The chemistry and physiology of the hum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       lectrophoresis 15:1459-1465(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 1-26 FROM N.A.
MEDLINE=86140099; PubMed=2419329;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-76257808; PubMed-955075;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-78186630; PubMed-656055;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 25-44 AND 480-499.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acetylsalicylic acid.";
FEBS Lett. 66:173-175(1976).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 1-455 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BILIRUBIN-BINDING SITE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 222-229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 25-609.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 25-609.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFIDE BONDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jacobsen C.;
            REPRESENTED FOR THE SERVICE SE
```

```
MEDLINE-92190239; PubMed-1347703;
Minchiotti L., Galliano M., Stoppini M., Ferri G., Crespeau H.,
Rochu D., Porta F.;
"Two alloalbumins with identical electrophoretic mobility are produced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peach R.J., Brennan S.O.;
"Structural characterization of a glycoprotein variant of human serum albumin: albumin Casebrook (494 Asp--Asn).";
Blochim. Biophys. Acta 1097:49-54(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-91062352; PubMed-2247440;
Galliano M., Minchiotti L., Porta F., Rossi A., Ferri G., Madison J.,
Watkins S., Putnam F.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Brennan S.O., Myles T., Peach R.J., Donaldson D., George P.M.; "Albumin Redhill (-1 Arg, 320 Ala-->Thr): a glycoprotein variant of human serum albumin whose precursor has an aberrant signal peptidase
                                     MEDLINE-87157744; Pubmed-3828358; Brennan S.O., Herbert P.; "Albumin Canterbury (313 Lys-->Asn). A point mutation in the second domain of serum albumin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VARIANTS IOWA CITY-2 VAL-25; IOWA CITY-1 VAL-389; KOMAGOME-3 HIS-23; KOMAGOME-2 ARG-152 AND KOMAGOME-1 GLU-396.
MEDLIKE-92052189; PubMed=1946412;
Madison J., Arai K., Feld R.D., Kyle R.A., Watkins S., Davis E., Madison Y.-I., Amaki I., Petram F.W.;
"Genetic variants of serum albumin in Americans and Japanese.";
Proc. Natl. Acad. Sci. U.S.A. 88:9853-9857(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         VARIANTS MANAUS; OSAKA; NAGOYA; FUKUOKA; HONOLULU AND NEW-GUINEA. MEDILINE-90115905; PubMed-2404284; Arai K., Madison J., Shimuzu A., Putnam F.W.; "Point substitutions in albumin genetic variants from Asia."; Proc. Natl. Acad. Sci. U.S.A. 87:497-501(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VARIANTS TORINO LYS-84; VARESE HIS-23 AND VIBO VALENTIA LYS-106.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 produce two
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'Mutations in genetic variants of human serum albumin found in
                                                                                                                                                                            MEDLINE-88068523; PubMed-347977;
Takshashi N., Takahashi Y., Isobe T., Putnam F.W., Fujita M.,
Satoh C., Neel J.V.;
                                                                                                                                                                                                                                       'Amino acid substitutions in inherited albumin variants from
                                                                                                                                                                                                                                                                                                                                                         Arai K., Madison J., Huss K., Ishioka N., Satoh C., Fujita
Meel J.V., Sakurabayashi I., Putnam F.W.;
"Point substitutions in Japanese alloalbumins";
Proc. Natl. Acad. Sci. U.S.A. 86:6092-6096(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Watkins S., Madison J., Davis E., Sakamoto Y., Galliano M., Minchiotti L., Putnam F.W.;
A donor Splice mutation and a single-base deletion produce carboxyl-terminal variants of human serum albumin.";
Proc. Natl. Acad. Sci. U.S.A. 88:5959-5963(1991).
                                                                                                                                                                                                                                                           Amerindian and Japanese populations.";
Proc. Natl. Acad. Sci. U.S.A. 84:8001-8005(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Proc. Natl. Acad. Sci. U.S.A. 87:8721-8725(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 87:26-30(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VARIANTS SONDRIO LYS-357 AND PARIS-2 ASN-587.
                                                                                                                    Biochim. Biophys. Acta 912:191-197(1987).
                                                                                                                                                                                                                                                                                                                    VARIANTS NAG-1; HIR-1; HIR-2 AND TOCHIGI.
MEDLINE-89345611; PubMed-2762316;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VARÍANT VENEZIA.
MEDLINE-91296740; PubMed-2068071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DESCRIPTION OF VARIANT REDHILL.
MEDLINE-90115852; PubMed-2104980;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=91316157; PubMed=1859851;
                    VARIANT CANTERBURY ASN-337
                                                                                                                                                            VARIANTS NAG-2 AND NAG-3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VARIANT CASEBROOK ASN-518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cleavage site."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Italy.
```

٠,

```
..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUL-1986 (Rel. 01, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Serum albumin precursor [Contains: Neurotensin-related peptide (NRP)].
                               Gaps
                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 223-288 AND 572-608.
MEDLINE-76260153; PubMed-956149;
Isemura S., Ikenaka T.;
"Fragmentation of rat serum albumin by cyanogen bromide cleavage and the amino acid sequences of four fragments.";
J. Biochem. 79:1183-1196(1976).
                                                                                                                                                                                                                                                                                                                                                                                                                               Strauss A.W., Bennett C.D., Donohue A.W., Rodkey J.A., Alberts A.W., "Rat liver pre-proalbumin: complete amino acid sequence of the pre-piece. Analysis of the direct translation product of albumin
                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. SEQUENCE FROM N.A. McGe7017712; Sargent T.D., Yang M., Bonner J.; Sargent T.D., Yang M., Bonner J.; "Nucleotide sequence of cloned rat serum albumin messenger RNA."; Proc. Natl. Acad. Sci. U.S.A. 78:243-246(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Isemura S., Ikenaka T.;
"Amino acid sequences of fragments I and II obtained by cyanogen bromide cleavage of rat serum albumin.";
J. Blochem. 83:35-48(1978).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carraway R.E., Mitra S.P., Cochrane D.E., Structure of a biologically active neurotensin-related peptide obtained from pepsin-treated albumin(s).", J. Biol. Chem. 262:5968-5973(1987).
                               ö
Score 58; DB 1; Length 609;
Pred. No. 0.0014;
Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         messenger RNA.";
J. Biol. Chem. 252:6846-6855(1977).
                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOOD FLOW (POTENTIAL).
SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: Plasma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Plasma;
MEDLINE=87194805; PubMed=2437111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 25-222.
MEDLINE=78109429; PubMed=564345;
                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COPPER-BINDING.
MEDLINE-79001617; PubMed-80265;
                                                                                                                                                    ALBU_RAT STANDARD; F P02770; P11382; 21-JUL-1986 (Rel. 01, Created) 21-JUL-1986 (Rel. 01, Last seque 28-FEB-2003 (Rel. 41, Last anno
 100.0%;
                            11; Conservative
                                                                                                                                                                                                                                                    Rattus norvegicus (Rat).
                                                        1 AHKSEVAHRFK 11
                                                                       (||||||||||
26 AHKSEVAHRFK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 166-174.
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                           NCBI_TaxID=10116;
                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ++
                                                                                                                                       ALBU_RAT
                                                                                                                        RESULT
                                                                                a
a
                                                        ö
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.3%; Score 57; DB 1; Length 608; 90.9%; Pred. No. 0.0022;
                                                                                                                                                                                                                                                                                                             SERUM ALBUMIN.
NEUROTENSIN-RELATED PEPTIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -> L (IN REF. 5).
5BB497A282411AB7 CRC64;
                                                                                                                                                                                                                                          SMART; SM00103; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 3.
Metal-binding; Lipid binding; Repeat; Signal; Copper.
-1- SIMILARITY: BELONGS TO THE ALB/AFP/VDB FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                        BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY
SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                     ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
                                                                                                                                                                                     InterPro; IPR000264; Serum_albumin.
Pfam; PF00273; transport_brot; 3.
PRINTS: PR00802; SERUMALBUMIn; ProDom; PD002486; Serum_albumin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -
-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Serum albumin precursor (Fragment).
                                                                                                                                                                                                                                                                                                                                                                             COPPER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Macaca mulatta (Rhesus macaque).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68718 MW;
                                                                                                                                              EMBL; V01222; CAA24532.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |||||:|||||
26 AHKSEIAHRFK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cercopithecinae; Macaca
NCBI_TaxID=9544;
                                                                                                                                                                                                                                                                                                            608
174
205
397
595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   174
608 AA;
                                                                                                                                                             ABRTS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
nes 10; Conserv
                                                                                                                                                                        P02768; 1E7B
                                                                                                                                                            PIR; A93872
HSSP; P0276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALBU_MACMU
Q28522;
                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                        PEPTIDE
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                  SIGNAL
PROPEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VARIANT
                                                                                                                                                                                                                                                                                                                                                   DOMAIN
                                                                                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALBU_MACMU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALB.
ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCOC OCCOC OCCO
```

609 AA

```
STANDARD;
                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                       NCBI_TaxID=10047;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
25
25
213
213
28
28
78
700
100
            ALBU_MERUN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
                                                                                                                                                           Meriones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHAIN
                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation for Encopean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                      MEDLINE-93311971; PubMed-8460152; Watkins S.A., Sakamoto Y., Madison J.M., Davis E.M., Smith D.G., Watkins S.A., Sakamoto Y., Madison J.M., Davis E.M., Smith D.G., Daviet J., Putnam F.W. Constant Sequence of polymorphic macaque albumins that differ in bilirubin binding."; Proc. Natl. Acad. Sci. U.S.A. 90:2409-2413(1993).

-I- FUNCTION: Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood.
-I- SUBCELLUIAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY. E45C871A670E740B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
COPPER (BY SIMILARITY).
BY SINTLARITY.
BY SINTLARITY.
BY SINTLARITY.
BY SINTLARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00212; ALBUMIN; 3.
Metal-binding; Lipid-binding; Repeat; Signal; Copper.
NOW_TER 1
                                                                                                                                                                                     -i- TISSUE SPECIFICITY: Plasma.
-i- SIMILARITY: BELONGS TO THE ALB/AFP/VDB FAMILY.
-i- SIMILARITY: Contains 3 albumin domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 54; DB 1; I pred. No. 0.0081;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 0.(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SERUM ALBUMIN
                                                                                                                                                                                                                                                                                                                                   or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                                                                                                                            PIR; A47391; A47391.
HSSP; P02768; IE7B.
InterPro; IPR002264; Serum_albumin.
Pfam; PF00273; transport_prot; 3.
PRINTS; PR00802; SERUMALBUMIN.
ProDom; PD002486; Serum_albumin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93.1%; 8
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67880 MW;
                                                                                                                                                                                                                                                                                                                                                                EMBL; M90463; AAA36906.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00103; ALBUMIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best_Local Similarity
Matches 10; Conserv
             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
DOMAIN
DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROPEP
```

```
STRAIN-MGS IDR; TISSUE-Liver;

MEDLINE-98116663; PubMed-4455485;

MEDLINE-98116663; PubMed-4455485;

TVOSHIGA K., Seto-Ohshima A., Sinohara H.;

"Sequencing of cDNA encoding serum albumin and its extrahepatic
"Sequencing of cDNA encoding serum albumin and its extrahepatic
"Sequencing of cDNA encoding serum albumin, the main protein of plasma, has a good
DNA Res. 4:351-354(1997).

"TOWACTION: Serum albumin, the main protein of plasma, has a good
binding capacity for water, Ca(2+), Na(+), K(+), fatty acids,
hormones, bilitubin and drugs. Its main function is the regulation
of the colloidal osmotto pressure of blood.

"TSSUE SPECIFICITY: Plasma.

"ISSUE SPECIFICITY: BLONGS TO THE ALB/AFP/VDB FAMILY.

"ISSUE SPECIFICITY: BLONGS TO THE ALB/AFP/VDB FAMILY.
"SIMILARITY: Contains 3 albumin domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profilt institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licenseélsb-sib.ch).
                                                                                                       Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9CA5F97F67EF1A48 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PERMIT PROBLEM SETUR_ABDUMIN.
Pfam; PF00273; transport_prot; 3.
PRINTS; PR00802; SERUMALBUMIN.
PRODOM; PD002486; SETUR_ABDUMIN; 1.
PROSITE; PS00212; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 3.
MELAI binding; Lipid-binding; Repeat; Signal; Copper.
SIGNAL
19 24 BY SIMILARITY.
                          15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY.
SIMILARITY.
SIMILARITY.
SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY.
SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY.
SIMILARITY.
SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SERUM ALBUMIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY
SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALBUMIN 2.
ALBUMIN 3.
COPPER.

        BY

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AB006197; BAA21765.1; -. PIR; JC5838; JC5838.
HSSP; P02768; 1E7B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68940 MW:
                                                                           Serum albumin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24
609
206
398
596
28
87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1116
1126
1126
1126
1202
1271
1273
1386
1386
1394
1463
1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            539
583
609 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
```

.; 0

Gaps

ö

Indels

ö

Conservative

2 HKSEVAHRFK 11

19

a à

RESULT

```
DOMAIN
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 1-32.
MEDLINE-80024278; PubMed=488109;
MGGLIlivray R.T.A., Chung D.W., Davie E.W.;
"Blosynthesis of bovine plasma proteins in a cell-free system. Amino-terminal sequence of preproalbumin.";
Eur. J. Blochem. 98:477-485(1979).
                              Gaps
                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoldea;
Bovidae; Bovinae; Bos
                             ;
                                                                                                                                                                                                                                                                                                                                             Č.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 19-28.
MEDLINE-77134075; PubMed-843354;
Patterson J.E., Geller D.M.;
"Bovine microsomal albumin: amino terminal sequence of bovine
                                                                                                                                                                                                                                                                                                                                             Hentges
           Length 609;
 Score 54; DB 1; Lengtn vv. Pred. No. 0.0082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-82023364; PubMed-7283978; Reed K.G., Putnam F.W., Peters T. Jr.; "Sequence of residues 400-403 of bovine serum albumin."; Blochem. J. 191:867-868(1980).
                                                                                                                                                                                                                                               Peters T.
databases.
                                                                                                                                                                                                                                                                                                                                                                              Wu H.T., Huang M.C.;
"The complete cDNA sequence of bovine serum albumin.";
Submitted (AUG-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                           Barry T., Power S., Gannon F.;
Submitted (JUL-1994) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                         Hilger C., Grigioni F., de Beaufort C., Michel G., Hent
Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            [6]
SEQUENCE OF 25-424 AND 429-607, AND VARIANT THR-214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       proalbumin.";
Blochem. Biophys. Res. Commun. 74:1220-1226(1977).
[10]
                                                                                                            ALBULBOVIN STANDARD; PRT; 607 AA. P02769; 002787; 21-JUL-1986 (Rel. 01, Created) PrB-1996 (Rel. 33, Last sequence update) 28-FEB-2003 (Rel. 41, Last annotation update) Serum albumin precursor (Allergen Bos d 6).
                                                                                                                                                                                                                                             Holowachuk E.W., Stoltenborg J.K., Reed R.G., Submitted (AUG-1991) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Submitted (APR-1975) to the PIR data bank
                                                                                                                                                                                                                                                                                                                                                             [4]
SEQUENCE FROM N.A., AND VARIANT THR-214.
                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., AND VARIANT THR-214.
TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        serum albumin.";
         93.1%;
81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brown J.R.;
"Structure of bovine serum
Fed. Proc. 34:591-591(1975)
Query Match
Best Local Similarity 81.0.
9, Conservative
                                              1 AHKSEVAHRFK 11
                                                         |||||:|||:|
27 AHKSEIAHRYK 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REVISIONS TO 190-195.
                                                                                                                                                                              Bos taurus (Bovine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [8]
SEQUENCE OF 402-433
                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                   NCBI_TaxID-9913;
                                                                                                                                                                                                                                                                                                                                  TISSUE-Liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brown J.R
                                               à
                                                              g
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fed. Proc. 33:1389-1389(1974).

-1- FUNCTION: Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the Colloidal Osmotic pressure of blood.

-1- SUBCELLUIAR LOCATION: Secreted.
-1- SIMILARITY: BELONGS TO THE ALB/APP/VDB FAMILY.
-1- SIMILARITY: Contains 3 albumin domains.
SEQUENCE, AND REVISIONS TO 118-119 AND 180.
MEDLINE-91083649; PubMed=2260975;
Hirayama K., Akashi S., Furuya M., Fukuhara K.-I.;
"Rapid confirmation and revision of the primary structure of bovine serum albumin by ESIMS and Frit-FAB LC/MS.";
Biochem. Blophys. Res. Commun. 173:639-646(1990).
                                                                                                                                                                                                                            MEDLINE-88267456; PubMed=3389500;
Hsieh J.C., Lin F.P., Tam M.F.;
"Electroblotting onto glass-fiber filter from an analytical
"Isoelectrofocusing gel: a preparative method for isolating proteins
for N-terminal microsequencing.";
Anal. Biochem. 170:1-8(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam: PF60273; transport_prot; 3.
PRINTS; PR002021; transport_prot; 3.
PRINTS; PR008021; SERUMALBUMIN.
Probom; PD002486; Serum_albumin; 1.
SMART; SM00103; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 3.
Metal-binding; Lipid-binding; Repeat; Signal; Copper; Allergen; Polymorphism. 1 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
COPPER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'Structure of serum albumin: disulfide bridges.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vilbois F.;
Submitted (AUG-1998) to the SWISS-PROT data bank.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SERUM ALBUMIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; Y17769; CAA.OO.....
EMBL; AF542068; AAN17824.1; -.
HSSP; P02768; 1E7B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; M73993; AAA51411.1; -. EMBL; X58989; CAA41735.1; -. EMBL; Y17769; CAA76847.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 437-451.
                                                                                                                                                                                                          SEQUENCE OF 25-41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFIDE BONDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Brown J.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROPEP
CHAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
```

us-09-845-726a-1_copy_2_12.rsp

```
Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                          608 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Liver;
                                                                                                                                                                               DISULFID
DISULFID
DISULFID
                                                                                                            DISULFID
                DISULFID
                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                              DISULFID
                                                                                         DISULFID
                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALBU_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PT
PT
PT
PT
PT
PT
PT
PT
PT
SO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its mose by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oryctolagus cuniculus (Rabbit),
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                        DB 1; Length 607;
                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                           A -> T.

C -> K (IN REF. 6).

KP -> PC (IN REF. 6).

N -> D (IN REF. 6).

ST -> TS (IN REF. 6).

K -> B (IN REF. 6).

K -> B (IN REF. 6).

K -> B (IN REF. 6).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HSSP; FULZOOS; FULZOS; PULZOS; PULZOS; PULZOS; PULDED.

PERMITS; PRO0273; Transport_prot; 3.

PRINTS; PR00802; SERUMALBUMIN.

PRODOM; PD002486; SETUM_albumin; 1.

PROSITE; PS00212; ALBUMIN; 3.

PROSITE; PS00212; ALBUMIN; 3.

MART; SMO0103; Lipid-binding; Repeat; Signal; Copper.

BROSITE: PS00212; PS02122; PS00212; PS
                                                                                                                                                                                                                                                                                                                              Pred. No. 0.013;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SERUM ALBUMIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
COPPER.
                                                                                                                                                                                                                                                                                                      91.4%; Score 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U18344; AAB58347.1; -. HSSP; P02768; 1E7B.
                                                                                                                                                                                                                                                               69293 MW;
                                                                                                                                                                                                                                                                                                                                     90.06;
                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Serum albumin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24
608
205
397
595
                                                                                                                                                                                                                                                                                                                                                                                                                                ||||:|||||
27 HKSEIAHRFK 36
                                                                                                                                                                                                                                                                                                                                                                                                      2 HKSEVAHRFK 11
    484
499
5337
214
304
304
334
437
493
607 AA;
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                           6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALBU_RABIT
P49065;
                                                                                                                        CONFLICT
CONFLICT
CONFLICT
                                                                                                                                                                                         CONFLICT
CONFLICT
CONFLICT
SEQUENCE
                            DISULFID
                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DOMAIN
DOMAIN
DOMAIN
                                                                                                  VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          METAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THEFFE THE PRANCE OF COCCOCCOCCE AND PRANCE OF THE FFF THE FFF
            δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
```

```
RA KAWAI J., Shingawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA KAWAI J., Shingawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Pukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Satu T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Szuki R., Tomita M., Wagner L., Washio T.,
RA Barke J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N. H.,
RA Gustincich P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch R.,
RA Sasaki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Hayashizaki Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     van Reeth T., Gabant P., Dreze P., Szpirer J., Szpirer C., Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 52; DB 1; Length 608;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CF5E92647AAFE9A2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALBU, MOUSE STANDARD; PRT; 608 AA. P07724; Q61802; Clarated) Clarate 1988 (Rel. 07, Created) 28-Jul-1999 (Rel. 38, Last sequence update) 28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Mismatches
                                                 SIMILARITY.
                                                                                                                                       SIMILARITY
                                                                                                            SIMILARITY
                                                                                                                                                                       SIMILARITY
                                                                                                                                                                                                                            SIMILARITY
                                                                                                                                                                                                                                                      SIMILARITY
                                                                                                                                                                                                                                                                                                              SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY
                                                                               SIMILARITY
                                                                                                                                                                                              SIMILARITY
                                                                                                                                                                                                                                                                                 SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-C57BL/6J; TISSUE-Tongue;
MEDLINE-21085660; PubMed-11217851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 99-516 FROM N.A.
MEDLINE-88216123; PubMed=2452956;
68914 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 90...
9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Serum albumin precursor.
ALB OR ALB1 OR ALB-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |||||:||||
26 AHKSEIAHRF 35
86
1125
1125
1125
201
2277
2277
2277
313
313
3462
4462
4462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AHKSEVAHRF 10
```

```
68692 MW;
                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; X74045; CAA52194.1; -. PIR; S34053; ABHOS.
                                                                         Conservative
                                                                                                                                        STANDARD;
                                                                                                                                                                           Serum albumin precursor.
   511
583
591
27
33
                                                                                               1 AHKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24
607
204
396
594
27
86
                                                  Query Match
Best Local Similarity
'...... 8; Conserve
  500
538
582
27
33
41
608 AA;
                                                                                                                                                                                                               NCBI_TaxID=9796;
                                                                                                                                        ALBU_HORSE
  DISULFID
               DISULFID
CONFLICT
CONFLICT
                                             SEQUENCE
                                     CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROPEP
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAIN
                                                                                                                                 ALBU_HORSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             METAL
                                                                                                                                                                                    ALB.
                                                                                                                           RESULT 8
   FT
FT
FT
FT
SO
                                                                                       à
                                                                                                   g
                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                      Minghetti P.P., Law S.W., Dugaiczyk A.;
"The rate of molecular evolution of alpha-fetoprotein approaches that
of pseudogenes.";
                                                         Boccaccio C., Deschatrette J., Meunier-Rotival M.; Empty and occupied insertion site of the truncated LINE-1 repeat located in the mouse serum albumin-encoding gene."; Gene 88:181-186(1990).
                                                                                                                                                                                                                                                                                                                                     Pfam; PF00273; transport_prot; 3.
PRINTS; PR00802; SERUMALBUNIN.
PRODOM, PD002486; SERUM_albumin; 1.
SMART; SM00103; ALBUMIN; 3.
Metal-binding; Lipid-binding; Repeat; Signal; Copper. SIGNAL 1 18 BY SIMILARITY.
1 24 24 SERUM ALBUMIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY. SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY
SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                       ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
                                                                                                                                                                                                                                                                     EMBL; AJ011413; CAA09617.1; -.
EMBL; M16111; AAA37190.1; -.
EMBL; X13060; CAA31458.1; -.
EMBL; AK010025; BAB26650.1; -.
PIR; A05139; A05139.
HSSP; P02768; IE7B.
SWISS-2DPAGE; P07724; MOUSE.
MGD; MGI:87991; Alb1.
InterPro; IPR000264; Serum_albumin.
                                                                                                                                                                                                                                                                                                                                                                                                                             COPPER
                      Mol. Biol. Evol. 2:347-358(1985).
                                           STRAIN-BALB/c;
MEDLINE-90269606; PubMed-1971802;
                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 477-551 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                         24
608
205
3397
27
27
27
115
115
193
270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
385
385
462
472
                                                                                            SEQUENCE OF 25-44.
                                                                                                   TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
DISULFID
DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                      DOMAIN
DOMAIN
DOMAIN
METAL
```

```
TISSUE-Liver;

WHO JISSUE-Liver;

WHO JISSUE-Liver;

WHO JISSUE A MEDIANG STRUCTURE OF HORSE SERUM albumin (Equus caballus)

WHO JISSUE A MEDIANG STRUCTURE OF HORSE SERUM albumin (Equus caballus)

WHO JISSUE A MEDIANG STRUCTURE OF HORSE SERUM albumin (Equus caballus)

WHO JISSUE A MEDIANG STRUCTURE OF HORSE SERUM A MEDIANG SERUM A M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Equús caballus (Horse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Perissodactyla, Equidae, Equus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND X-RAY CRYSTALLOGRAPHY (2.7 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                       84.5%; Score 49; DB 1; Length 608; 80.0%; Pred. No. 0.075; 1.1ve 2; Mismatches 0; Indels
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
H -> D (IN REF. 5).
H -> D (IN REF. 5).
C -> I (IN REF. 5).
W, 292F7C7ED3A61B4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PSO0212; ALBUMIN; 3.
Metal-binding; Lipid-binding; Repeat; Signal; Copper.
SIGNAL 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
COPPER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
BY SIMILARITY.
SERUM ALBUMIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HSSP; P02768; 1E7B.
InterPro; IPR000264; Serum_albumin.
Pfam: PP00273; transport_prot; 3.
PRINTS; PR00802; SERUMALBUMIN.
ProDom: PD002486; Serum_albumin; 1.
SMART; SM00103; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 3.
```

```
DOMAIN
                  SIGNAL
                                                                           METAL
                                                                                                                                                                                                                                                                                                                                                          RESULT 10
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                            δλ
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                   Brown W.M., Dziegielewska K.M., Foreman R.C., Saunders N.R.;
"Nucleotide and deduced anno acid sequence of sheep serum albumin.";
"Nucleic Acids Res. 17:10495-10495(1989).

In PUNCTION: Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, blirtubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood.

SUBCELLUIAR LOCATION: Secreted.
                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                  Ovis aries (Sheep).
Sukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Caprinae; Ovis.
                                                                                                                                                                                            ö
                                                                                                                                                                        Length 607;
                                                                                                                                                                                            0; Indels
                                                                                                                                                       68598 MW; 256F6E830A1B90C5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -i-TISSUE SPECIFICITY: Plasma.
-i-SIMILARITY: BELONGS TO THE ALB/AFP/VDB FAMILY.
-i-SIMILARITY: Contains 3 albumin domains.
                                                                                                                                                                         Score 48; DB 1;
Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                   01-APR-1990 (Rel. 14, Created)
01-APR-1990 (Rel. 14, Last sequence update)
28-FBB-2003 (Rel. 41, Last annotation update)
Serum albumin precursor.
                                                                                                                                                                                                                                                                                 607 AA
                                                                                                                                                                                           1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; X17055; CAA34903.1; -.
PIR; S06936; ABSHS.
HSSP, PO2768; LE7B.
InterPro; IPR000264; Serum_albumin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pfan, PP00273; transport_prot; 3.
PRLNYIS; PR00802; SERUMALBUMIN.
ProDom; PD002486; Serum_albumin; 1.
SMART; SM00103; ALBUMIN; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Liver;
MEDLINE=90098888; PubMed=2602160;
                                                                                                                                                                          82.8%;
88.9%;
                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                  STANDARD;
                                                                            384
392
461
471
500
                                                                                                                                                                                                                          ||||:||||
27 HKSEIAHRF 35
                                                                                                                                                                                                                2 HKSEVAHRF 10
                                                                                                                                            581 E
                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9940;
  99
1114
1147
1223
2268
3301
3339
4415
460
484
537
                                                                                                                                                                                              .;
8
                                                                                                                                                                                                                                                                                  ALBU_SHEEP
                                      DISULFID
DISULFID
DISULFID
            DISULFID
                                                                                                                                                                         Query Match
Best Local S
                                                                    DISULFID
                                                                               DISULFID
                                                                                       DISULFID
                                                                                               DISULFID
                                                                                                           DISULFID
                                                                                                                   DISULFID
                                                                                                                           DISULFID
                                                                                                                                      DISULFID
                                                                                                                                              DISULFID
                                                                                                                                                       SEQUENCE
                               DISULFID
   DISULFID
                                                                                                                                                                                                                                                                                            P14639;
                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                RESULT 9
                                                                                                                                                                                                                                                                                   g
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licenseéisb-sib.ch).
                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Felis silvestris catus (Cat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Felidae; Felis.
                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                          Score 48; DB 1; Length 607; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                       84979A87F8B86596 CRC64;
                                                                                  COPPER (BY SIMILARITY).
BY SIMILARITY.
         Repeat; Signal; Copper.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
01-FEB-2003 (Rel. 41, Last annotation update)
Serum albumin precursor (Allergen Fel d 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                   608 AA
                                                                                                                                                                                                                                           SIMILARITY.
SIMILARITY.
SIMILARITY.
SIMILARITY.
                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                   SIMILARITY
                                                                ALBUMIN 2
                                                                         ALBUMIN 3
                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE=96194824; PubMed=8647469;
                                                                                                Lipid-binding;
18 B
                                                                                                                                                                                                                                                                                        69188 MW;
                                                                                                                                                                                                                                                                                                             82.8%;
88.9%;
                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                               24
6607
5996
6074
2007
1115
1192
2000
2206
4461
4461
471
                                                                                                                                                                                                                                           500
510
582
                                                                                                                                                                                                                                                                                                                                                          2 HKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                     ||||:||||
27 HKSEIAHRF 35
                               Best Local Similarity
Matches 8; Conserv
PROSITE; PS00212;
Metal-binding; Lip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=9685;
                                                                                                                                                                                                                                                                                                                                                                                                                                     ALBU_FELCA
                                                                                                                                                                             DISULFID
                                                                                                                                                                                                             DISULFID
                                                                                                                                                       DISULFID
                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                   DISULFID
                                                                                                                       DISULFID
                                                                                                                                   DISULFID
                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                               P49064;
                                                                  DOMAIN
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modifited and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -> D (IN REF. 1; AAA30988). 3E556B0DD1A1F4FF CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
SERUM ALBUMIN.
ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
COPPER (BY SIMILARITY).
BY SIMILARITY.
                                                                                                                                                                                                                                                                        SMART; SMO0103; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 3.
Metal-binding; Lipid-binding; Repeat; Signal; Copper.
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1990 (Rel. 16, Created)
01-AUG-1992 (Rel. 23, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Serum albumin precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 47; DB 1;
Pred. No. 0.18;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  615 AA
                                                                                                                                                                         PIR; S01382; ABPGS.
HSSP. P02768; 1E7H.
InterPro; IPR000264; Serum_albumin.
Pfam; PF00273; transport_prot; 3.
PRINYS; PR00802; SERUMALBUMIN.
ProDom; PD002486; Serum_albumin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69410 MW;
                                                                                                                                           EMBL; X12422; CAA30970.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      :|||:|||||
25 YKSEIAHRFK 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 HKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         535
579
562
605 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                      . <1
23
209
401
31
75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALBU_CHICK
P19121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                      SIGNAL
PROPEP
CHAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gallus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
ALBU_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                    TETAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALB.
        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sus scrofa (Pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
                                                                                                                                         Repeat; Signal; Copper; Allergen.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 48; DB 1; Length 608; Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07E629CAC5F60E5F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                 SIMILARITY
                                                                                                                                                                                                                                                                     SIMILARITY. SIMILARITY.
                                                                                                                                                                                         SERUM ALBUMIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Mismatches
                                                                                                                                                                                                                     ALBUMIN 2.
ALBUMIN 3.
                                                                                                                                                                                                           ALBUMIN 1
                                         InterPro; IPR000264; Serum_albumin.
Pfam: PF00273; transport_prot; 3.
PRINTS; PR008002; SERUMALBUMIN.
Probom: PD002486; Serum_albumin; 1.
SWART; SW00103; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 3.
Wetal-binding; Lipid-binding; Repeat; SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Serum albumin precursor (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-Liver;
MEDLINE-89016582; PubMed-3174440;
                                                                                                                                                                                                                                                                     BY
BY
BY
BY
BY
BY
BY
BY
                                                                                                                                                                                                                                                                                                                                                                                                                BY
BY
BY
BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALBU_PIG STANDARD; F P08835, Q29018; Q1-NOV-1988 (Rel. 09, Last seq. 28-FEB-2003 (Rel. 41, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68659 MW;
EMBL; X84842; CAA59279.1; -. PIR; JC4660; S57632. HSSP; P02768; 1E7B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82.8%;
80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 80.(
les 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11:11:111
26 AHQSEIAHRF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AHKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                            416
461
485
500
538
582
608 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mammalia; Euther:
NCBI_TaxID=9823;
                                                                                                                                                                     PROPEP
CHAIN
DOMAIN
DOMAIN
DOMAIN
METAL
DISULFID
                                                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                                 DISULFID
                                                                                                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
 DOR KWW KWW CORREST OF THE FET THE FET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

Gaps

```
Score 45;
Pred. No. 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Metal-binding; Lipid-binding; Copper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSSP; B02768; 1E7H.
InterPro; IPR000264; Serum_albumin.
Pfam; PF00273; transport_prot; 1.
PROSITE; PS00212; ALBUMIN; PARTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=98103404; PubMed=9440230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=95309661; PubMed=7789749;
                                           5;
   77.6%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40 AA; 4682 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7; Conservative
                           Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||||: |||
HKSEIVHRF 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 HKSEVAHRF 10
                                                                            2 HKSEVAHRF 10
                                                                                                  HKSEIAHRY 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 1-8.
                                                                                                                                                                                                       ALB1_TRASC
P81188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
            Query Match
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
ALBU_CANFA
                                                                                                                                                                     RESULT 13
ALB1_TRASC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                       Piochem. Blophys. Res. Commun. 78:1060-1066(1977).

-1- FUNCTION: Serum albumin, the main protein of plasma, has a good binding capacity for water. Ca(2+), Na(+), K(+), fatty acids, binding capacity for water. Ca(2+), Na(+), K(+), fatty acids, hormones, blitrubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood.
-1- SUBCELLUIAR LOCATION: Secreted.
-1- TISSUE SPECIFICITY: Plasma.
-1- SIMILARITY: BELONGS TO THE ALB/AFP/VDB FAMILY.
                                                             SEQUENCE OF 1-28 FROM N.A. MEDILIBE-81161037; Pubmed-6187737; MEDILIBE-81161037; Pubmed-6187737; Hache R.J.G., Wiskothl R., Vasa M., Roy R.N., Lau P.C.K., Deeley R.G.; "The 5' noncoding and flanking regions of the avian very low density apolipoprotein II and serum albumin genes. Homologies with the egg white protein genes "; Biol. Chem. 258:4556-4564(1983).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LINKED (GLCNAC, . .) (POTENTIAL). -> M (IN REF. 3). E59E4BBCAEC066C6 CRC64;
                                                                                                                                                                                                                        MEDLINE-78019943; PubMed-911327;
Rosen AM., Geller D.M.;
"Chicken microsomal albumin: amino terminal sequence of chicken proalbumin.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; X60688; CAA43098.1; -.
EMBL; V00381; CAA23680.1; -.
PIR; S1571; ABCHS.
HSSP; P02768; IE7B.
InterPro; IPR000264; Serum_albumin.
Pfam; PR00273; transport_prot; 3.
PRINTS; PR00802; SERUMALBUMIN.
ProDom; PD002486; Serum_albumin; 1.
SMART; SM00103; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 3.
Metal binding; Lipid binding; Repeat; Signal; Copper.
SIGNAL
            Baverstock P., Wallace J.C.;
EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
COPPER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY.
SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY. SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SERUM ALBUMIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       595 BY
500 N
24 F
69918 MW;
          Cassady A.I., Salklld C.K.,
Submitted (JUL-1991) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1172
1152
1152
1293
304
420
4420
489
504
500
500
615
AA;
                                                                                                                                                                                                         SEQUENCE OF 19-30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISCLETD
DISCLETD
DISCLETD
DISCLETD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROPEP
CHAIN
DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          METAL
```

```
ö
                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- MISCELLANEOUS: IN THE RED-EARED SLIDER TURTLE, THERE ARE TWO FORMS OF ALBUMIN, ALB-1 AND ALB-2.
-!- SIMILARITY: BELONGS TO THE ALB/AFP/VDB FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                          Gaps
                                                                                                                                                                                                                                                                                             15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
67 kDa serum albumin (Alb-1) (Fragment).
Trachemys scripta (Red-eared slider turtle) (Pseudemys scripta).
Elexaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Testudines; Cryptodira; Testudinoidea; Emydidae; Trachemys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brown M.A., Chambers G.K., Licht P.;
"Purification and partial amino acid sequences of two distinct
albumins from turtle plasma.";
Comp. Blochem. Physiol. 1188:367-374(1997).
                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75.9%; Score 44; DB 1; Length 40; 77.8%; Pred. No. 0.037; Live 1; Mismatches 1; Indels
DB 1; Length 615;
                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5FAC9E49E2789BB0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COPPER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALBU_CANFA STANDARD; PRT; 608 AA. P49822; 077705; Q9TS24; 01-0CT-1996 (Rel. 34, Created) 16-0CT-2001 (Rel. 40, Last sequence update) 16-0CT-2003 (Rel. 41, Last annotation update) Serum albumin precursor (Allergen Can f 3).
                                                                                                                                                                                                                                                    40 AA
                                          Mismatches
```

```
DISULFID
                                                                                                                                                                                                                                    DISULFID
                                                                                                                                                                                                                                                  DISULFID
                                                                                                                                                                                                                                                                                                  CONFLICT
                                                                                                                                                                                                                                                                                                                                                     CONFLICT
 DOMAIN
DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
RBMC_MOUSE
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-Salivary gland;

TISSUE-Salivary gland;

X MEDLINE-9401492; PubMed-7512102;

X MEDLINE-9401492; PubMed-7512102;

X Molevlar C., Sperr W. R., Pandjaltan B., Valent P.,

Muehl S., Ebner C., Scheiner O., Kraft D., Rumpold H.;

Molevlar characterization of dog albumin as a cross-reactive

allergen.";

Allergy Clin. Immunol. 93:614-627(1994).

1. Allergy Clin. Immunol. 93:614-627(1994).

2. In FUNCTION: Serum albumin, the main protein of plasma, has a good

binding capacity for water, Ca(2+), Na(+), fatty acids,

hormones, bilitubin and drugs. Its main function is the regulation

of the colloidal osmotic pressure of blood.

1. SINELLUAR LOCATION: Secreted.

1. INSUE SPECIFICITY: Plasma.

1. ININGELIUR. BELONGS TO THE ALB/APP/VDB FAMILY.

1. SIMILARITY: Contains 3 albumin domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                SEQUENCE OF 25-48.

MEDLINE=75011422; PubMed=4414013;
Dixon J.W., Sarkar B.;
"Isolation, amino acid sequence and copper(II)-binding properties of peptide (1-24) of dog serum albumin.";
J. Biol. Chem. 249:5872-5877(1974).
                                                                                                                                                                                                                                                                                                                                     TISSUE-Heart;
MEDINE-98163340; PubMed-9504812;
Dubin M.J., Corbett J.M., Wheeler C.H.;
Pusc-2DPAGE and two-dimensional gel electrophoresis database of
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                                                   Pandjaitan B., Swoboda I., Brandejsky-Pichler F., Rumpold H., Valenta R., Spitzauer S., Brandejsky-Pichler Coll Expression and purification of recombinant dog albumin, a cross-reactive animal allergen.";
J. Allergy Clin. Immunol. 105:279-285(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Repeat; Signal; Copper; Allergen.
                                                                           Hilger C.; Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SERUM ALBUMIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                 Electrophoresis 18:2795-2802(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSC-2DPAGE; P49822; DOG.
InterPro; IPR000264; Serum_albumin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00273; transport_prot; 3.
PRINTS; PR00802; SERUMALBUMIN.
ProDom; PD002486; Serum_albumin; 1.
SWART; SM00103; ALBUMIN; 3.
                                                                                                                                          MEDLINE-20148667; PubMed-10669848;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AJ133489; CAB64867.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Metal-binding; Lipid-binding;
                                                               STRAIN-Beagle; TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; Y17737; CAA76841.1; -. EMBL; S72946; AAB30434.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00212; ALBUMIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HSSP; P02768; 1E7B.
                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 25-38.
                                                SEQUENCE FROM N.A.
                          NCBI_TaxID=9615;
                                                                                                                              TISSUE-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROPEP
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-C57BL/63; TISSUE-Embryo, and Head;
MEDLINE-22254683; PubMed=12466851;
Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Golobori T.,
Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
Schriml L.M., Kanaphi A., Matsuda H., Batalov S., Beisel K.W.,
Blake J.A., Bradt D., Brustc V., Chothia C., Corbani L.E., Cousins S.,
Dalla E., Dragani I.A., Fletcher C.F., Forrest A., Frazer K.S.,
Gaasterland T., Gariboldi M., Gissi C., Godaik A., Gough J.,
Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RBMC_MOUSE STANDARD; PRT; 1002 AA.
QBR4X3; QBR373; QBR302; Q9CSB0;
15-SEP-2003 (Rel. 42, Last sequence update)
15-SEP-2003 (Rel. 42, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
15-SEP-2003 (Rel. 42, Last annotation update)
RNA-binding protein 12 (RNA binding motif protein 12) (SH3/WW domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Huang C.-H.;
Tadentification of SWAN as a novel hnRNP-like adaptor protein with
multiple domains and broadly expressed in mammalian tissues.";
Submitted (JUN-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                            MKWVTFISLFFLFSSAYSRGLVRREA -> MDT (IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 608;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                          REF. 2).

A -> R (IN REF. 2).

V -> A (IN REF. 2).

S -> A (IN REF. 2).

V -> A (IN REF. 1).

V -> V (IN REF. 1).

V -> V (IN REF. 1).

W, 3CF1C8FF7DD8FC06 CRC64;
ALBUMIN 1.
ALBUMIN 2.
ALBUMIN 3.
COPPER (BY SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 43; DB 1;
                                                                                                                                 SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 1.1;
3; Mismatches
                                                                                                    SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          anchor protein in the nucleus) (SWĀN). RBM12.
                                                                     BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68606 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74.18;
70.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 74.1
Best Local Similarity 70.0
Matches 7; Conservative
 1 AHKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |:|||:|||:
26 AYKSEIAHRY 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              448
474
608 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
                                                                                 DISULFID
DISULFID
DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                      DISULFID
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                CONFLICT
CONFLICT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONFLICT
                                                                                                                                                                                                                                                                                                                                            DISULFID
                                                                   DISULFID
                                                                                                                                                                      DISULFID
                                                                                                                                                                                                                                                                                             DISULFID
```

```
Kanal A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
Maglott D.R., Maltais L., Marchionni L., Mokrante L., Miki H.,
Magashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
Ravasi T., Reed J.C., Reed D.J., Raid J., Ring B.Z., Ringwald M.,
Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
Verardo R., Wansher L., Wahlestedt C., Wang Y., Watanabe Y., Watlana K.,
Vuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazune N., Sato K.,
A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
Miyazaki A., Sasaki D., Shibata K., Sihnaqawa A.,
Asunishi A., Soshino M., Waterston R., Lander E.S., Rogers J.,
Manalysis of the mouse transcriptome based on functional annotation of
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-C57BL/63; TISSEB-Reast tumor;

X STRAIN-C57BL/63; TISSEB-Reast tumor;

X Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

X Strausberg R.L., Zeeberg B., Grouse L.H., Derge J.G.,

Altschul S.F., Zeeberg B., Buctow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Nathorias R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Alting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Nhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rahakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Rotiquez A.C., Grimwood J., Schmutz J., Myers R.M.,

Rotiquez A.C., Grimwood J., Schmutz J., Myers R.M.,

Roterratical Y.S. N., Krzywinski M.I., Skalska U., Smailus D.E.,

Rahaman A., Rother M., Madan A., J. J. J. Marra M.A.;

Roberration and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tobustalian and sequences.",
and mouse cDNA sequences.",
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-1- SUBCELLUIAR LOCATION: Nuclear (By similarity).
-1- SIMILARITY: Contains 3 RNA recognition motif (RRM) domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART; SMUOJSU; RRW, RN-1; FALSE_NEG.
PROSITE; PS001030; RRW; 3.
Nuclear protein; RNN-binding; Repeat.
DOMAIN 304 379 RNA-BINDING (RRW) 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AF345334; AAL63754.1; -.
EMBL; AF393215; AAM73683.1; -.
EMBL; AR393216; AAM73684.1; -.
EMBL; AR017591; BAB30825.1; -.
EMBL; AR02180; BAC26338.1; -.
EMBL; AR080772; BAC28911.1; -.
EMBL; AR080772; BAC38017.1; -.
EMBL; AC02681; AAH226891.1; -.
EMBL; AC02681; AAH22810.1; ALT_INIT.
EMBL; BC027810; AAH2810.1; ALT_INIT.
MGD; MGI:1922960; Rbm12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR000504; RNA_rec_mot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 116-1002 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00076; rrm; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART; SM00360; RRM;
```

```
ö
                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                    ö
                                                             G -> S (IN REF. 2; BAC28911).
G -> S (IN REF. 2; BAB30825).
G -> C (IN REF. 2; BAB30825).
M.SSING (IN REF. 2; BAB30825).
M.SSING (IN REF. 2; BAC26338).
G -> GGG (IN REF. 1).
V -> A (IN REF. 1).
V -> G (IN REF. 1).
AP -> G (IN REF. 1).
AP -> G (IN REF. 1).
AP -> G (IN REF. 1).
                                                                                                                                                                                               63.8%; Score 37; DB 1; Length 1002; 72.7%; Pred. No. 27; 1ve 0; Mismatches 3; Indels
                                                                                                                                                                    P -> L (IN REF. 1).
MW; 5B560124232F6A49 CRC64;
                                    I -> T (IN REF. 1).
N -> S (IN REF. 2;
BAC26338/BAC28911/BAC38017)
                  GLY-RICH.
RNA-BINDING (RRM) 3.
RNA-BINDING (RRM) 2.
                                                                                                                                                                                                                                                                                  Search completed: August 29, 2003, 14:26:59 Job time : 25 secs
                                                                                                                                                                              103724
                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                  |||||| || |
598 AHKSEHLHRKK 608
                                                                                                                                                                                                                                       1 AHKSEVAHRFK 11
507
925
924
1002
122
572
                                                                        729
739
766
                                                                                                             766
819
824
827
842
850
907
                                                                                                             762
819
824
827
842
842
842
907
1002 AA;
                                                                                                                                                                                                         Local Similarity
nes 8; Conserv
                                                                                                                                         CONFLICT
CONFLICT
CONFLICT
CONFLICT
SEQUENCE
                          DOMAIN
                                                                           CONFLICT
                                                                                                                       CONFLICT
                                                                                                                                                                                                Query Match
                                              CONFLICT
                                                                CONFLICT
                                                                                            CONFLICT
                                                                                                             CONFLICT
                  DOMAIN
                                                                                                                                                                                                                    Matches
g
```

```
Q9cs80 mus musculu Q8r302 mus musculu Q8psw8 methanosarc Q8r4x3 mus musculu 011370 molluscum c Q98304 molluscum c Q8pfe6 xanthomonas Q8fv53 brucella su Q8v53 brucella me Q9mzu5 sus scrofa Q9xc24 oryza sativ Q20042 caenorhabdi Q95q9 caenorhabdi Q95y1 homo sapien Q9by1 homo sapien Q9by3 homo sapien Q9by3 homo sapien Q9179 emericella
                                                                                                                                                                                                                                                                                                                                                                                                                  032383 streptomyce
Q8pzm0 methanosarc
Q9kqv0 vibrio chol
Q27502 caenorhabd1
                                                                                                                                                                                                                                                                                                                                                               Q8e511 streptococc
Q9cah5 arabidopsis
Q54274 streptomyce
O32383 streptomyce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q9w6r6 fugu rubrip
Q921m6 mus musculu
Q9p2r8 homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 21, Last annotation update)
01-JOHN-2002 (TrEMBLrel. 21, Last annotation update)
49 kDa protein (Fragment).
Rattus sp.
Rattus sp.
Rattus sp.
Retazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
100.0%; Score 58; DB 11; Length 21;
Best Local Similarity 100.0%; Pred. No. 0.0001;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE.
MEDLINE=93105636; PubMed=1468220;
Zhu L., Crouch R.K.;
Albumin in the corne is oxidized by hydrogen peroxide.";
Cornea 11:567-572(1992).
HSSP; POZ768; LEH.
HSSP; POZ768; LEH.
Fransport_prot; 1.
SEQUENCE 21 AA; 2429 MW; 26134A3D7CE29FAC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         396 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALIGNMENTS
 099CSB0
08PSWB
08R4X3
011370
098304
08PFE6
08PFE6
09XC53
09XC24
09XC53
09XC54
09XC54
09XC54
09XC10
00XC10
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q8IUK7;
Q8IUK7;
01-MAR-2003 (TEMBLFel. 23,
01-MAR-2003 (TEMBLFel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
                 841
1003
1003
1003
117
117
11885
11988
11988
11988
11988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AHKSEVAHRFK 11
 663.8
663.8
662.1.6
662.1.1
662.1.1
662.1.1
662.1.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
663.1
66
                                                                                                                                                                                                                                                                                                                                           600.33
600.33
600.33
600.33
600.33
600.33
 090VA1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
 290VA1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q8IUK7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DA PP PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Opprwo struthio ca
Optr98 canis famil
O9tg6 macaca fasc
O9pg4 ureaplasma
Q8eqm2 oceanobacil
Q81500 plasmodium
O8ynil anabaena sp
Q98nt8 rhizobium l
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9qval rattus sp. Q8iuk7 homo sapien Q9qux8 rattus sp. Q95vb7 schlstcsoma Q914x7 mycobacteri Q9tra5 oryctolagus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q8cg74 mus musculu
Q8c7h3 mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                   August 29, 2003, 14:23:55; Search time 95 Seconds (without alignments) 29.880 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
               GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                      Potal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                       830525 segs, 258052604 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                         - protein search, using sw model
                                                                                                                                                                                                      US-09-845-726A-1_COPY_2_12
58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       090VA1
081UK7
090UX8
095VB7
09F4X7
09FR4X7
09FR4X9
09FRW0
09PFW0
09PFW0
09PCX6
09PCX6
09PCX6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q8YNI1
Q98NT8
                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sp_virus:*
sp_vertebrate:*
sp_unclassified:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sp_invertebrate:*
sp_mammal:*
sp_mhc:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sp_bacteriap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sp_archea:*
sp_bacteria:*
sp_fungi:*
sp_human:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sp_organelle:*
sp_phage:*
                                                                                                                                                                                                                                                                                                                                                                                                                seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp_archeap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp_plant:*
sp_rodent:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sp_rvirus:*
                                                                                                                                                                                                                                          1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPTREMBL_23:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        998.3
998.3
998.3
98.7
74.7
74.7
74.7
68.1
69.5
63.8
63.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 39.5
38
38
37
37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein
                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB
Maximum DB
                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
```

```
Pfam; PF00273; transport_prot; 3. PRINTS; PR00802; SERUMALBUMIN. ProDom; PD002486; Serum_albumin; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match
Best Local Similarity 90.v.
The properties of the conservative of the cons
                                                                                                                                                                         Local Similarity 90.9 es 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                              |||||:|||||
26 AHKSEIAHRFK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 HKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 HKSEIAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                           SEQUENCE
                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q9TRAS
Q9TRAS;
                                                                                                                                                                                                                                                                                                                                                                                         Q9R4X7
                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
                                                                                                                                                                                                                                                                                                                                             RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9TRA5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 П
                                                                                                                                                                                                                                                                                                                                                                                                             a
          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schistosoma mansoni (Blood fluke).

Sukaryota, Metazoa; Platyhelminthes; Trematoda; Digenea; Strigeidida; Schistosomatoidea; Schistosomatoidea; Schistosomatoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus sp.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
Osman A., Asahi H., Stadecker M.J., LoVerde P.T.;
Osman A., Asahi H., Stadecker M.J., LoVerde P.T.;
Albumin precursor homolog is a novel T helper cell immunogenic egg
component in murine infection with Schistosoma mansoni.";
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, A418550; AAL08579.1. -.
InterPro; IPR000264; Serum_albumin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-UNV-2002 (TEMBLrel. 12, Last annotation update)
01-UNV-2002 (TEMBLrel. 21, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oncauka M., Imai S., Isobe T., Yen C.T., Watanabe K.;
*Purification and characterization of a novel 70-kDa brain protein associated with seizure activities.";
Neurochem. Res. 20:901-905(1995).
HSSP: P02768; IE7H.
SEQUENCE 20 AA; 2381 MW; 534A23C0F9F70F7D CRC64;
                                   Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                  100.0%; Score 58; DB 4; Length 396; 100.0%; Pred. No. 0.0027; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 57; DB 11; Length 20;
Pred. No. 0.00015;
1; Mismatches 0; Indels
                                                                                                                                                                               Strausberg R.; Strausberg R.; Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases. EMBL; BC035969; AAH35969.1; SEQUENCE 396 AA; 45159 MW; 756519C096463A9B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 095VB7;
01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DMAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             608 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
               Similar to serum albumin precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-96087830; PubMed-8587647;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 AHKSEIAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                       1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
es 10; Conserv
                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=6183;
                                                                                                  NCBI_TaxID=9606;
                                                                                                                                                                    rissue-Liver;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Albumin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               095VB7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09QUX8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9XUQ60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              095VB7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                 ò
```

```
ö
                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ಡ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     οţ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 21, Last annotation update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Antagonist protein (Fragment).
Oryctolagus cuniculus (Rabbit).
Eukaryota, Metazoa, Chordata, Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDINE-94359514; PubMed-8078511;
Xu A., Narayanan N.;
Xu A., Narayanan N.;
"Purification, amino-terminal sequence and functional properties of the actycsolic protein from heart muscle capable of modulating calcium transport across the sarcoplasmic reticulum in vitro.";
Mol. Cell. Biochem. 132:7-14(1994).
HSSP: P02768; IE7H.
Interpro; IPR000264; Serum_albumin.
Ffam; PF00273; transport_prot; 1.
SEQUENCE 40 AA; 4694 MW; BA7E0B69C6CE858C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-DCC-2001 (TrEMBLrel. 19, Last annotation update)
04-DBC-2001 (TrEMBLrel.)
Mycobacterium tuberculosis.
Mycobacterium tuberculosis.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales; Corynebacterineae; Mycobacteriaee; Mycobacterium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIJINE-94343500; PubMed-8064836; Deshpande R.G.; Khan M.B., Bhat D.A., Navalkar R.G.; Deshpande R.G., Khan M.B., Bhat D.A., Navalkar R.G.; Purification and partial characterisation of a novel 66-kDa seroreactive protein of Mycobacterium tuberculosis H37Rv."; J. Med. Microbiol. 41:173-178(1994).

SEQUENCE 20 AA; 2393 MW; 534A232072870F7D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            66-kDa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 52; DB 6; Length 40; Pred. No. 0.0034;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 53; DB 2; Length 20;
Pred. No. 0.00098;
1; Mismatches 0; Indels
                                                                                                             Length 608;
                                                                                                                                                                              Indels
SMART; SM00103; ALBUMIN; 3.
PROSITE; PS00212; ALBUMIN; 2.
SEQUENCE 608 AA; 68225 MW; E5EABB28E1C66E54 CRC64;
                                                                                                                98.3%; Score 57; DB 5; 90.9%; Pred. No. 0.0071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AA
                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91.4%;
```

ó

Gaps

ö

0; Indels

ð

```
Struthio camelus (Ostrich).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Palaeognathae; Struthioniformes; Struthionidae;
                                                                                                                                                                                                                                                                                                    MEDLINE-94341467; PubMed-8063009; Kuhn C.R., Naude R.J., Travis J., Oelofsen W.; The isolation and partial characterization of alpha 1-proteinase "The isolation and partial characterization of alpha 1-proteinase inhibitor from the serum of the ostrich (Struthio camelus)."; Int. J. Biochem. 26:843-853(1994).
SEQUENCE 30 AA; 3557 MW; 7775AA786EE30AC2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OFFIGE.

OFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Albumin (Fragment).
Canis familiaris (Dog).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Carnivora, Fissipedia, Canidae, Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Plasma proteins as early biomarkers of exposure to carcinogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-95007849; PubMed-7923441;
Miller M.J., Parmelee D.C., Benjamin T., Sechi S., Dooley K.L.,
Kadlubar F.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 45; DB 13; Length 30;
Pred. No. 0.062;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chem. -Biol. Interact. 93:221-234(1994).
SEQUENCE 17 AA; 2024 MW; 1D39F70F7D23B269 CRC64;
                            Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 43; DB 6;
Pred. No. 0.083;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
01-DEC-2001 (TrEMBLrel. 19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 77.6
Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AHKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AYKSEIAHRY 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 HKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 HKSEIAHRY 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
7; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           aromatic amines.";
                                                                                                                                                                                                                              NCBI_TaxID=8801;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9615;
                                                                                                                                                                                                         Struthio
                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9TR98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q9TR98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09TQZ6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09TR98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09TQZ6
       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-C57BL/6J; TISSUE-Liver;
MEDLINE-22354683: PubMed-12466851;
The FANTOM CONSOrtium.
The RIKEN Genome Exploration Research Group Phase I & II Team;
Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length convas.";
Nature 420:563-573(2002).
EMBL; AKO50248; BAC34145.1; -.
SEQUENCE 608 AA; 68722 MW; 292F600EED3A61B4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
       ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN-129/SvevTACfBr;
Van Reeth T., Dreze P.L., Gabant P., Szpirer C., Szpirer J.;
Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ277794; CAC81903.1; -.
NON_TER 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84.5%; Score 49; DB 11; Length 205; 80.0%; Pred. No. 0.084;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 49; DB 11; Length 608;
Pred. No. 0.28;
2; Mismatches 0; Indels
       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205 AA; 23624 MW; 0A982E85C7474BF9 CRC64;
                                                                                                                                                                                                                                                                     01-WAR-2003 (TrEMBLrel. 23, Created)
01-WAR-2003 (TrEMBLrel. 23, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-WAR-2003 (TrEMBLrel. 23, Created)
01-WAR-2003 (TrEMBLrel. 23, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30 AA.
                                                                                                                                                                                                                           205 AA
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
  ;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84.5%;
80.0%;
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 80.08; Conservative
                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1||||:|||:
26 AHKSEIAHRY 35
                                                   1 AHKSEVAHRF 10
                                                                             ||||||:||||
2 AHKSEIAHRF 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AHKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AHKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                            (Wonse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
'-kng 8; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |||||:|||:
AHKSEIAHRY
                                                                                                                                                                                                                                                                                                                                                Albumin (Fragment).
Mus musculus (Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=10090;
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Albumin 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q8C7H3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q9PRW0
                                                                                                                                                                                                                           Q8CG74
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 9
Q9PRW0
ID Q9PRW
                                                                                                                                                                        RESULT 7
Q8CG74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
```

08C7H3

ò 셤

ò 셤 ö

Gaps

ö

Indels

Length 17;

```
Nucleic Acids Res. 30:3927-3935(2002).

EMBL; AP004598; BAC13629.1.; -

Hypothetical protein; Complete proteome.

SEQUENCE 152 AA; 18357 WW; 5FCAPI43BF2D0265 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     f match 65.5%;
Local Similarity 45.5%;
les 5; Conservative
                                                            Query Match 65.5%;
Best Local Similarity 66.7%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           791 SHKDEVSHKYE 801
                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AHKSEVAHRFK 11
                                                                                                             2 HKSEVAHRF 10
                                                                                                                             111:: | | |
19 HKSDLLHRF 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=103690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                              NCBI_TaxID=36329;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                               Q815D0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q8YNI1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
Q8YNI1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
                                                                                                                                                                          RESULT 14
Q815D0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                οy
     RE DR SO
                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
                                                                                                                                                    ö
               MEDLINE=96273610; PubMed-8699030;
MEDLINE=96273610; PubMed-8699030;
Nicolas M.G., Fujiki K., Murayama K., Suzuki M.T., Mineki R.,
Nicolas M.G., Fujiki K., Murayama R., Suzuki M.T., Mineki R.,
Hayakawa M., Yoshikawa Y., Cho F., Kanai A.;
Studies on the mechanism of early onset macular degeneration in
cynomolgus (Macaca fascicularis) monkeys. I. Abnormal concentrations of
two proteins in the retina.";
Exp. Eye Res. 62:211-219(1996).
Exp. Eye Res. 62:211-219(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-HTEB31 / DSM 14371 / JCM 11309;
MEDLINE-22220767; PubMed-12235376;
Takami H., Takaki Y., Uchiyama I.;
"Genome sequence of Oceanobacillus iheyensis isolated from the Iheya Ridge and its unexpected adaptive capabilities to extreme environments.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                   Ureaplasma parvum (Ureaplasma urealyticum biotype 1).
Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Ureaplasma.
NCBI_TaxID=134821;
                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-Serovar 3;
MEDLINE-20500219; PubMed-11048724;
Glass J.B., Lefkowitz E.J., Glass J.S., Heiner C.R., Chen E.Y.,
Cassell G.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6
                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68.1%; Score 39.5; DB 16; Length 201; 52.6%; Pred. No. 6.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               "The complete sequence of the mucosal pathogen Ureaplasma urealyticum.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                             Length 20;
                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FD0012911C4BD7E8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                           01-0cT-2000 (TrEMBLrel. 15, Created)
01-0cT-2000 (TrEMBLrel. 15, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacteria; Firmicutes; Bacillales; Oceanobacillus. NCBI_TaxID-182710;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                             Score 43; DB 6;
Pred. No. 0.099;
                                                                                                                     74.1%; Scor.
100.0%; Pred. No. v.-.
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             152 AA.
                                                                                                                                                                                                                                                                  201 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nature 407:757-762(2000).

EMBL, AE002125; AAF30696.1; -.

Hypothetical protein; Complete proteome.

SEQUENCE 201 AA; 23872 WW; FD0012911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 HKS-----EVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-2003 (TrEMBLrel. 23, Las
Hypothetical conserved protein.
                                                                                                                                                                                                                                                                                                                               Hypothetical protein UU287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oceanobacillus iheyensis
                                                                                                                                          Local Similarity 100.
nes 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                             2 HKSEVAHR 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                               Query Match
                                                                                                                                                                                                                                                                   Q9PQK4
Q9PQK4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q8EQM2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q8EQM2
                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 13
                                                                                                                                                                                                                                            RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OBEOM2
                                                                                                                                                                                                                                                          Q9PQK4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
         RP RA RA RT SO SO
                                                                                                                                                                                 õ
                                                                                                                                                                                                       a
```

```
ö
                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-22255705; PubMed=12368864;
Gardner M.J., Hall N., Fung E., White O., Berriman M., Hyman R.W.,
Carlton J.M., Pain A., Nelson K.E., Bowman S., Paulsen I.T., James K.,
Elsen J.A., Rutherford K., Salzberg S.L., Craig A., Kyes S.,
Chan M.-S., Nene V., Shallom S.J., Suh B., Peterson J., Angluoll S.,
Pertea M., Allen J., Selengut J., Haft D., Mather M.W., Valdya A.B.,
Martin D.M.A., Fairlamb A.H., Fraunholz M.J., Roos D.S., Ralph S.A.,
WcFadden G.I., Cummings L.M., Subramanian G.M., Mungall C.,
Venter J.C., Carucci D.J., Hoffman S.L., Newbold C., Davis R.W.,
Fraser C.M., Barrell B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDITINE=21595285; PubMed=11759840; Kuritz T., Sasamoto S., Kaneko T., Nakamura Y., Wolk C.P., Kuritz T., Sasamoto S., Watanabe A., Iriguchi M., Ishikawa A., Kawashima K., Kimura T., Kishida Y., Kohara M., Matsumoto M., Matsuno A., Muraki A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Plasmodium falciparum (isolate 3D7).
Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3209;
Score 38; DB 16; Length 152;
Pred. No. 9.7;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Genome sequence of the human malaria parasite Plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 38; DB 5; Length 320;
Pred. No. 2.96+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anabaena sp. (strain PCC 7120).
Bacteria; Cyanobacteria; Nostocales; Nostocaceae; Nostoc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nature 419:498-511(2002).
EMBL; AE014848; AAN36365.1; -.
Hypothetical protein 378904 MW; DA2BBE1737C10873 CRC64;
SEQUENCE 3209 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT; 3209 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-WAR-2002 (TrEMBLrel. 20, Created) 01-WAR-2002 (TrEMBLrel. 20, Last sequ 01-WAR-2002 (TrEMBLrel. 20. Last secon 1-WAR-2002 (TrEMBLrel. 20. Last 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTEMBLES 20, CTERMELTES 20, C 01-MAR-2002 (TTEMBLES 20, L Hypothetical protein Asr4584.
```

```
RA Nakazaki N., Shimpo S., Sugimoto M., Takazawa M., Yamada M.,
RA Yasuda M., Tabata S.;
RT "Complete genomic sequence of the filamentous nitrogen-fixing
RT cyanobacterium Anabaena sp. strain PCC 7120.";
RL DNA Res. 8:205-213(2001).
DR EMBL, AP001396; BAB16283.1; .
KW Hypotherical protein; Complete proteome.
SQ SEQUENCE 93 AA; 10516 MW; EA46156F88729D0E CRC64;
Query Match
Best Local Similarity 66.7%; Pred. No. 8.9;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 HKSEVAHRF 10
```

Search completed: August 29, 2003, 14:28:44 Job time : 98 secs

1 ::|||||| 46 HAADVAHRF 54

q

THIS PAGE BLANK (USPTO)

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

- protein search, using sw model OM protein

Run on:

August 29, 2003, 14:24:05; Search time 39 Seconds (without alignments) 27.125 Million cell updates/sec

US-09-845-726A-1_COPY_2_12 58 score: Perfect

1 AHKSEVAHRFK 11 Sequence:

Gapop 10.0 , Gapext 0.5 **BLOSUM62** Scoring table:

283308 segs, 96168682 residues Searched:

283308 Total number of hits satisfying chosen parameters:

length: 0 length: 2000000000 Minimum DB seq Maximum DB seq

Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries

PIR_76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

								•																						
		cerd dimidle mures	albumin	albumin	in - Mone					serum albumin prec			serum albumin, mil	hypothetical prote			S	probable membrane	hypothetical prote	LSU ribosomal prot	unknown protein F2	methyl-accepting c	hypothetical prote	polyribonucleotide	ribsomal protein-l	hypothetical prote		d hyp	probable integrase	gephyrin homolog -
SUMMARIES	QI ;	ABHUS	ABRTS	A47391	JC5838 .	ABBOS	ABSHS	ABHOS	S57632	ABPGS	ABCHS	S29749	B61511	E82910	AH2378	T30740	AF3594	863392	T16270	G69489	D96750	H82143	T23256	C84068	T49921	C81282 .	A97575	A12795	₹.	T42407
	DB	; -	-	7	7	-		-	~	1	Н	~	~	~	N	C)	7	~	~	~	~	~	~	7	7	~	7	7	7	~
	Length	609	909	009	609	607	607	607	608	605	615	24	30	201	93	117	489	719	1827	155	320	. 672	696	138	156	200	222	222	382	391
d	Query Match	100.0	98.3	93.1	93.1	91.4	87.8	87.8	82.8	81.0	77.6	74.1	0.69	68.1	63.8	62.1	62.1	62.1	62.1	•	60.3	٠			28.6	28.6	58.6	58.6	58.6	58.6
	Score	58	57	54	54	53	48	48	48	47	45	43	40	39.2	37	36	36	36	36	32	32	32	32	34	34	34	34	34	34	34
	Result No.	1	7	m	4	S	9	7	œ ·	σ	10	11	12	13	14	12	16	17	18	19	20	21	22	23	24	25	26	27	28	58

glucose 6-phosphat probable glucose-6 IMP dehydrogenase hypothetical 53.4 probable enzyme [1 probable enzyme yj methlonine-tRNA 11 cholesterol monoox RLRI protein - yea hypothetical prote	nypochatical prote probable oxidoredu probable oxidoredu probable oxidoredu probable membrane
AG3151 D98136 144751 665216 665216 B86102 S73457 O4BOM 145184 T45184	E6412b C65074 C91100 G85945 AG0872
000000000000	0000r
461 461 478 488 488 512 520 1597 182	219 219 219 219
	00000 00000 00000
44444444666 66666666666666666666666666	" " " " " " " " " " " " " " " " " " " "
01108888888888888888888888888888888888	1 7 7 7 7 2 7 7 7 7 2 7 7 7 7

ALIGNMENTS

serum albumin precursor [validated] - human

```
C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 29-Jul-1981 #sequence_revision 31-Jan-1997 #text_change 17-Mar-2000
C; Date: 29-Jul-1981 #sequence_revision 31-Jan-1997 #text_change 17-Mar-2000
C; Accession: A93743; A93966; I39427; I59286; I59313; G01747; S55314; A91420; S06422;
R; Lawn, R.M.; Adelman, J.; Bock, S.C.; Franke, A.E.; Houck, C.M.; Najarlan, R.C.; See Nucleic Acids Res. 9, 6103-6114, 1981
A; Title: The sequence of human serum albumin cDNA and its expression in Escherichia c A; Reference number: A93743; MUID:82081882; PMID:6171778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A. Testuces: GB:M13075; NID:9178330; PIDN:AAA51688.1; PID:9553173
R:Watkins, S.; Madison, J.; Galliano, M.; Minchlotti, L.; Putnam, F.W.
R:Watkins, S.; Madison, J.; Galliano, M.; Minchlotti, L.; Putnam, F.W.
R:Watkins, S.; Madison, J.; Galliano, M.; Minchlotti, L.; Putnam, F.W.
R:Wattl. Acad. Scl. US:A. 91, 227-2279, 1994
A.Title: A nucleotide insertion and frameshift cause analbuminemia in an Italian fami A; Reference number: I59286 MUD:94181575; PMID:8134387
A; Accession: 159286
A; Status: translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 282-290, KSRFDLQ, <WAT>
A; Residues: 282-290, KSRFDLQ, <WATS
A; Residues: 282-290, KSRFDLQ, <WATS
A; Residues: 282-290, KSRFDLQ, <WATS
B; Madison, J.; Galliano, M.; Matkins, S.; Minchiotti, L.; Porta, F.; Rossi, A.; Putna
Broc. Natl. Acad. Sci. U.S.A. 91, 6476-6480, 1994
A; Title: Genetic variants of human serum ablumin in Italy: point mutants and a carbox
A; Reference number: 159313; MUD:94294404; PMID:8022807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
A; Residues: 1-120, /G., 122-609 < CDUG>
A; Residues: 1-120, /G., 122-609 < CDUG>
A; Cross-references: EMBL: V00494; NID: 928589; PIDN: CAA23753.1; PID: 928590
R; Urano, Y.; Watenabe, K.; Sakai, M.; Tamaoki, T.
J. Biol. Chem. 261, 3244-3251, 1986
A; Fitle: The human albumin gene. Characterization of the 5' and 3' flanking regions a A; Reference number: 139427; MUID: 86140099; PMID: 2419329
A; Accession: 139427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Accession: A93743
A;Molecule type: mRNA
A;Residues: 1-19,'K',421-609 <LAW>
A;Coss.references: EMBL: V00495; GB:U00078; GB:L00132; GB:L00133; NID:g28591; PIDN:CA
B;Dugaiczyk, A.; Law, S.W.; Dennison, O.E.
A;Title: Nucleotide sequence and the encoded amino acids of human serum albumin mRNA.
A;Reference number: A39336; MUID:82105994; PMID:6275391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Accession: I59313
A;Accession: translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 589-590, ALPRRVKNLLLQVKLP' <MAD>
A;Cross-references: GB:S70799; NID:9547231; PIDN:AAB31177.1; PID:9547232
N; Alternate names: preproalbumin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Status: translation not shown
A;Molecule type: DNA
A;Residues: 1-26 <URA>
                                                                N;Contains: kinetensin
```

Fri Aug

```
A; Residues: 76-83, 'K', 85-106 <GAL3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atase activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A Molecule type: protein

A Molecule type: protein

R Mogard, H.; Kobayashi, R.; Chen, C.F.; Lee, T.D.; Reeve Jr., J.R.; Shively, J.E.; Wa

B Hochem. Blophys. Res. Commun. 136, 983-988, 1986

A; Title: The amino acid sequence of kinetensin, a novel peptide isolated from pepsin-tre

A; Reference number: A03239; MUID: 86242180; PMID: 3087352

A; Molecule type: protein

A; Residuan, A; Amolecule type: protein

R; Galliano, M.; Minchiotti, L.; Porta, F.; Rossi, A.; Ferri, G.; Madison, J.; Watkins, S

Proc. Natl. Acad. Sci. U.S.A. 87, 8721-8725, 1990

A; Reference number: A38255; MUID: 91062352; PMID: 2247440

A; Recession: C38255
                                                                                                                                                                                                                                                                                                              A.Cross-references: EMBL:U22961; NID:g763428; PIDN:AAA64922.1; PID:g763431
R;Ledgerwood, E.C.; George, P.M.; Peach, R.J.; Brennan, S.O.
Bicchem. J. 308, 321-325, 1995
A;Title: Endoproteolytic processing of recombinant proalbumin variants by the yeast Kexz. A;Reference number: S55314; MUID:95275251; PMID:7755581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Residues: 25-117, EQ',120-154,'Q',156-193,'E',195-387,'H',389-390,'Y',392-393,'A',395-
A;Residues: 25-117, EQ', 121pier, D.
R;Roehr, U.; Spiteller, G.; Tripier, D.
Justus Liebigs Ann. Chem. 9, 881-884, 1988
A;Title: Isolation and structure elucidation of middle-molecular weight peptides from ux
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein
R; Residues: 25-48 cROE>
R; Residues: 25-48 cROE>
R; Finch, J.W.; Crouch, R.K.; Knapp, D.R.; Schey, K.L.
Arch. Biochem. Biophys. 305, 595-599, 1993
Arch. Biochem. Biophys. 305, 595-599, 1993
A; Title: Mass spectrometric identification of modifications to human serum albumin treat
A; Reference number: S36882; MUID:93384321; PMID:8373198
A;Note: this frame-shift variant is designated albumin Bazzano; four additional variants R;Menaya, J.; Parrilla, R.; Ayuso, M.S. submitted to the EMBL Data Library, March 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  - Bestandteile der Mittelmol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                the action of acid proteas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            peptides formed by PMID:2474609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A Molecule type: protein
A;Residues: 19-27 <LED.
F.Meloun, B.; Moravek, L.; Kostka, V.
FEBS Lett. 58, 134-137, 1975
A;Title: Complete amino acid sequence of human serum albumin.
A;Reference number: A91420; MUID:76187907; PMID:1225573
A;Accession: A91420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: protein A;Residues: 45-67;141-160;311-337;469-490;570-581 <FIN> R;Rausler, E.; Spiteller, G. Baol. Chem. Hoppe-Seyler 372, 849-855, 1991 A;Title: Bruchstuecke aus Albumin und beta(2)-Mikroglobulin A;Reference number: S17599; MUID:92126241; PMID:1772598 A;Referenc: S17599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: protein
A; Residues: 25-54:354.357.431-447 < KAU>
A; Note: 49-Leu was also found
B; Carraway, R.E.; Cochrane, D.E.; Boucher, W.; Mitra, S.P.
J. Immunol. 143, 1680-1684, 1989
A; Title: Structures of histamine-releasing peptides formed
A; Reference number: A45800; MUID:89341406; PMID:2474609
A; Accession: A45800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Note: this paper is in German, with an English abstract
A;Accession: $06422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Note: this variant is designated albumin Vibo Valentia A;Accession: A38255
                                                                                                                                                                                               A; Status: translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-120, 'G', 122-455 <MEN>
                                                                                                                  A; Reference number: G08292
A; Accession: G01747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Reference number: S06422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein
A; Residues: 76-111 <GAL1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: protein A; Residues: 82-105, 'K', 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: B38255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: S55314
```

```
Althrochicth, L., Calliano, W.; Zapponi, W.C.; Tenni, R.

Minchicth, L., Calliano, W.; Zapponi, W.C.; Tenni, R.

Minchicth, L., Calliano, W.; Zapponi, W.C.; Tenni, R.

Minchicth, L., Calliano, W.; Zapponi, W.C.; Tenni, R.

Anderson, Sargas

Ander
```

```
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||||||:|||||
26 AHKSEIAHRFK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 HKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Contents: B/B homozygote A; Accession: A47391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     albumin - Mongolian jird
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: JC5838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Accession: A47391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Status: prelimina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A.Molecule type: mRNA
A.Residues: 1-608 cSAR>
A.Residues: 1-608 cSAR>
A.Residues: 1-608 cSAR>
A.Cross-references: GB:V01222; GB:J00698; NID:g55627; PIDN:CAA24532.1; PID:g55628
A.Cross-references: GB:V01222; GB:J00698; NID:g6key, J.A.; Alberts, A.W.
J. Biol. Chem. 252, 6846-6855, 1977
A.Title: Rat liver pre-proalbumin: complete amino acid sequence of the pre-piece. Analys A.Reference number: A92211; MUID:77249557; PMID:893447
A.Note: cleavages during protein maturation
A.Accession: A92111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              I and II obtained by cyanogen bromide cleavag
PMID:564345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,Title: Determinants of rat albumin promoter tissue specificity analyzed by an improved A,Reference number: 157621; MUID:87286876; PMID:3475566
A;Accession: 157621
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                   F:27/Binding site: copper (His) #status predicted
F:77-86,99-115,114-125,148-193,192-201,224-270,269-277,289-303,302-313,340-385,384-393,4
F:214/Binding site: pyridoxal phosphate (Lys) (covalent) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             peptides formed by the action of acid proteas PMID:2474609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein
A; Residues: 125-222 <135>
R; Isemura, S.; Ikenaka, T.
J. Biochem. 79, 1183-1196, 1976
A; Title: Fragmentation of rat serum albumin by cyanogen bromide cleavage and the amino
A; Reference number: A91940; MUID:76266153; PMID:956149
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Date: 31-May-1979 #sequence_revision 31-May-1979 #text_dhange 22-Jun-1999 C; Accession: A93872; A92211; A91946; A91940; C45800; I57621; A03233 R; Sargent, T.D.; Yang, M.; Bonner, J. Proc. Natl. Acad. Sci. U.S.A. 78, 243-246, 1981 A.71tle: Nucleotide sequence of Cloned rat serum albuman messenger RNA. A; Reference number: A93872; MUID:81223722; PMID:701772
                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                              100.0%; Score 58; DB 1; Length 609; 100.0%; Pred. No. 0.004;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Title: Copper(II)-binding ability of human alpha-fetoprotein. A; Reference number: A90758; MUID: 79001617; PMID: 80265 A; Contrents: annotation; copper binding R; Carraway, R.E.; Cochrane, D.E.; Boucher, W.; Mitra, S.P. J. Immunoi. 143, 1680-1684, 1989 A; Title: Structures of histamine-releasing peptides formed by the A; Reference number: A45800; MUID: 89341406; PMID: 2474609
                                                                                                                                                                                                                                                                        0; Indels
F;166-174/Product: kinetensin #status experimental <KIP>F;221-394/Domain: serum albumin repeat homology <SA2>F;113-592/Domain: serum albumin repeat homology <SA3>
                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: protein
A; Residues: 1-38 GSTR>
R; Isemura, S.; Ikenaka, T.
J. Biochem. 83, 35-48, 1978
A; Titla: Anino acid sequences of fragments
A; Reference number: A91946; MUID:78109429
A; Accession: A91946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N; Alternate names: preproalbumin
C; Species: Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biol. 7, 2425-2434, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: protein
A; Residues: 223-288;572-608 <IS2>
A; Note: 262-Leu was also found
R; Aoyagi, Y: Ikenaka, T: Ichida,
Cancer Res. 38, 3483-3486, 1978
                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                  1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           serum albumin precursor -
                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: protein
A; Residues: 166-173 <CAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: C45800
                                                                                                                                                                                                                                                                  11;
                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 2
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
289-303,302-313,340-385,384-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Watkins, S.; Sakamoto, Y. Madison, J.; Davis, E.; Smith, D.G.; Dwulet, J.; Putnam, Proc. Natl. Acad. Sci. U. S.A. 90, 2409-2413, 1993
A;Title: CDNA and protein sequence of polymorphic macaque albumins that differ in bil A;Reference number: A47591; MUID:93211971; PMID:8460152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rivoshida, K.; Seto-Ohshima, A.; Sinohara, H.
DNA Res. 4, 351-354, 1997
A;Tile: Sequencing of CDNA encoding serum albumin and its extrahepatic synthesis in
A;Reference number: UC5838; MUID:98116663; PMID:9455485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: mRNA
A;Residues: 1-609 <YOS>
A;Cross.references: DDBJ:AB006197; NID:92317277; PIDN:BAA21765.1; PID:92317278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: Macaca mulatta (rhesys macaque)
C;Date: 21-Jan-1994 #sequence_tevision 18-Nov-1994 #text_change 20-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Meriones unguiculatus (Mongolian jird)
C;Date: 05-Mar-1998 #sequence_revision 13-Mar-1998 #text_change 19-May-2000
C;Accession: JC5838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A.Cross-references: GB:M90463; NID:9342294; PIDN:AAA36906.1; PID:9342295
A.Experimental Source: 11ver
A.Note: sequence extracted from NCBI backbone (NCBIN:128280, NCBIP:128281)
C.Superfamily: serum albumin; serum albumin repeat homology
F.21-194/Domain: serum albumin repeat homology <SA1>
F.213-386/Domain: serum albumin repeat homology <SA2>
F.216-584/Domain: serum albumin repeat homology <SA3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
A/Cross references: GB:MI6825, NID:9202828; PIDN:AAA40712.1; PID:9554412 (5.9uperfamily: serum albumin repeat homology C.Superfamily: serum albumin repeat homology C.Superfamily: serum albumin repeat homology C.Superfamily: signal sequence #status experimental carrow fr.19-24/Domain: signal sequence #status experimental carrow fr.19-24/Domain: propeptide #status experimental carrow fr.29-202/Domain: propeptide #status experimental carrow fr.29-202/Domain: serum albumin repeat homology carrow fr.29-202/Domain: serum albumin repeat homology carrow fr.29-202/Domain: serum albumin repeat homology carrow fr.27/Binding site: copper (His) #status experimental fr.77-86,99-115,114-125,148-193,192-201,224-270,269-277/289-303,302-313,34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A, Experimental source: liver
C; Superfamily: serum albumin; serum albumin repeat homology
F; 222-395/Domain: serum albumin repeat homology <SA2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93.1%; Score 54; DB 2; Le illarity 100.0%; Pred. No. 0.023; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 57; DB 1;
Pred. No. 0.0062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      facaque
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98.38;
90.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              serum albumin precursor - rhesus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA; protein A; Residues: 1-600 < WAT>
```

```
R; Brown, J.R.
A; 11tle: Structure of bovine serum albumin.
A; Reference number: A91458
A; Recession: A91458
A; Reference number: A9451
A; Reference number: A9451
A; Recession: A9451
A; Recence number: A9451
A; Residues: 190-195 cas2>
A; Recence number: A9451
A; Recence number: A941457
A; Contents: annotation; disulfide bonds
A; Recence number: A941457
A; Contents: annotation; disulfide bonds
A; Recence number: S5232; MUD:95031935; PMID:7945219
A; Accession: S5232
A; Recence number: S5232; MUD:95031935; PMID:7945219
A; Accession: S5232
A; Recence number: S5232; MUD:95031935; PMID:7945219
A; Accession: S5232
A; Acce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Date: 3.1-bec.1333 *Leat_Linus 21-bec.1333 *Leat_Linus 21-bec.1333 *Leat_Linus 21-bec.133 *Leat_Linus 21-bec.133 *Leat_Linus 21-bec.133 *Leat_Linus 21-bec.133 *Leat_Linus 21-bec.133 *Leat_Linus 21-bec.233 *Leat_233 *Leat_Linus 21-bec.233 *Leat_Linus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 31-Dec_1993 #sequence_revision 31-Dec-1993 #text_change 22-Jun-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 53; DB 1; Length 607; Pred. No. 0.035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91.4%;
90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 serum albumin precursor - sheep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 HKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27 HKSEIAHRFK 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: protein
A;Residues: 25-41,'H',43-57,59-64 <STR>
A;Carraway, R.E.; Cochrane, D.E.; Boucher, W.; Mitra, S.P.
J. Immunol. 143, 1600-1684, 1989
A;Title: Structures of histamine-releasing peptides formed by the action of acid proteas
A;Reference number: A45800; MUID:89341406; PMID:2474609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A Molecule type: protein

A. Molecule type: protein

R. Residuces: 163-172 ccRn

R. Carraway, R.E.; Mitra, S.P.; Cochrane, D.E.

J. Biol. Chem. 262, 5968-5973, 1987

A. Title: Structure of a biologically active neurotensin-related peptide obtained from per a Reference number: A26693; MUID:87194805; PMID:2437111

A. Accession: A26693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        serum albumin precursor [validated] - bovine
N;Alternate names: 67K protein; preproalbumin
C;Species: Bos prinigenius taurus (cattle)
C;Species: Bos prinigenius taurus (cattle)
C;Accession: A38885; A36401; A91258; B60808; S10780; D45800; A26693; A90309; A91458; A94
R;Holowachuk, E.W.: Stoltenborg, J.K.; Reed, R.G.; Peters Jr., T.
Rybescription: Bovine serum albumin: cDNA sequence and expression.
A;Reference number: A38885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein
A; Residues: 25-41 <HSI>
A; Strawich, E.; Glimcher, M.J.
Eur. J. Blochem. 191, 47-56, 1990
A; Title: Tooth 'enamelins' identified mainly as serum proteins. Major 'enamelin' is albu
A; Reference number: S10780; MUID:90336641; PMID:2379503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Wolecule type: mRNA
A; Residues: 1-607 <HOLD.
A; Cross-recences: 1-607 <HOLD.
A; Cross-recences: 1-607 <HOLD.
B; Hirayama, K.; Akashi, S.; Furuya, M.; Fukuhara, K.
Biochem. Biophys. Res. Commun. 173, 639-646, 1990
Biochem. Biophys. Res. Commun. 173, 639-646, 1990
A; Title: Rapid confirmation and revision of the primary structure of bovine serum albumi
A; Reference number: A36401; MUID:91083649; PMID:2260975
A; Accession: A36401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Wolecule type: protein
A; Realdues: 1-32 cMAG.
A; Residues: 1-32 cMAG.
R; Hsieh, J.C.; Lin, F.P.; Tam, M.F.
Anal. Biochem. 170, 1-8, 1989
A; Title: Blectroblotting onto glass-fiber filter from an analytical isoelectrofocusing
A; Reference number: A60808; WUID:88267456; PMID:3389500
A; Accession: B60808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                Gaps
                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein
A; Residues: 165-172,'L' <CA2>
R; Reed, R.G.; Putnam, F.W.; Peters Jr., T.
Biochem. J. 191, 867-868, 1980
A; Title: Sequence of residues 400-403 of bovine serum albumin.
A; Reference number: A90309; MUID:82023364; PMID:7283978
A; Accession: A90309
                      Length 609
                                                                                                                    0; Indels
                          DB 2;
0.023;
                          Score 54; DB 2
Pred. No. 0.023
2; Mismatches
                               93.1%;
81.8%;
                               Query Match 93.1
Best Local Similarity 81.8
Matches 9; Conservative
                                                                                                                                                                                                     1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                       27 AHKSEIAHRYK 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein
A; Residues: 402-433 <REE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Accession: D45800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: S10780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: A38885
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                      g
```

Gaps

```
A Molecule type: protein

A; Residues: 23-51, X',53-54; XXXGY',146, E',148, E',150-151, XVN',155 < LIM>
A; Residues: 23-51, X',53-54; XXXGY',146, E',148, E',150-151, XVN',155 < LIM>
A; Residues: 23-51, X',53-54; XXXGY',146, E',148, E',150-151, XVN',155 < LIM>
A; Residues: 23-51, X',53-54; XXXGY',146, E',148, E',150-151, XVN',155 < LIM>
A; Residues: 23-51, X',53-54; XXXGY',146, E',148, E',150-151, XVN',155 < LIM>
A; Residues: 23-51, XV,53-54; XXXGY',146, E',148, E',150-151, XVN',155 < LIM>
C; Comment: Serum albumin arcelation are also found in bone
C; Comment: Serum albumin; #status predicted < NOTO-109; Residues: Resid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: S01382
A; Status: translation not shown
A; Status: translation not shown
A; Molecule type: mRNA
A; Residues: 1-605 <WEI>
A; CROSS references: BMBL:X12422; NID:91875; PIDN:CAA30970.1; PID:9833798
B; Limeback, H.; Sakarya, H.; Chu, W.; Mackinnon, M.
J. Bone Miner. Res. 4, 235-241, 1989
A; Title: Serum albumin and its acid hydrolysis peptides dominate preparations of mine
A; Reference number: A61006; MUID:89269769; PMID:2728927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  F;218-391/Domain: serum albumin repeat homology <SA2>
F;410-589/Domain: serum albumin repeat homology <SA3>
F;75-84,97-113,112-123,145-190,189-198,221-267,266-274,286-300,299-310,337-382,381-39
F;261/Binding site: bilirubin (Lys) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-615 <CAS.
A; Residues: 1-615 <CAS.
A; Cross-references: EMBL: X60688; NID: 963747; PIDN: CAA43098.1; PID: 963748
A; Cross-references: EMBL: X60688; NID: 963747; PIDN: CAA43098.1; PID: 963748
B; Hache, R.J.G.; Wiskocil, R.; Vasa, M.; Roy, R.N.; Lau, P.C.K.; Deeley, R.G.
J. Biol. Chem. 258, 4556-4564, 1983
A; Title: The 5' noncoding and flanking regions of the avian very low density apolipop A; Reference number: A05078; MUID: 83161037; PMID: 6187737
                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                              serum albumin precursor - pig (fragment)
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 22-Jun-1999
C;Accession: S01382; A61006
R;Weinstcock, J.; Baldwin, G.S.
Nucleic Acids Res. 16, 9045, 1988
A;Fitle: Nucleotide sequence of porcine liver albumin.
A;Reference number: S01382; MUID:89016582; PMID:3174440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Gallus gallus (chicken)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 22-Jun-1999
C;Accession: S15571; A05078; A13451
R;Cassady, All; Salklld, C.K*; Baverstock, P.; Wallace, J.C.
submitted to the EMBL Data Library, July 1991
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                          Indels
                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 0.49;
                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 47;
                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.0%;
80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     serum albumin precursor - chicken
                80.08;
                Best Local Similarity 80.0
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 80.0 Matches 8; Conservative
                                                                                                                                    10
                                                                                                                                                                                  ||:||:|||
26 AHQSEIAHRF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 HKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     :|||:|||||
25 YKSEIAHRFK
                                                                                                                                    1 AHKSEVAHRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: S15571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                    ò
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-607 < HOA>
C; Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper, teroid hormones (weak bonds with these hormones promote thair transfer across the membra c; Superfamily: serum albumin repeat homology
C; Reywords: Carrier protein; duplication; metal binding; plasma
F; 19-24/Pomain: signal sequence #status predicted < PRO>
F; 19-24/Pomain: propeptide #status predicted < PRO>
F; 25-607/Product: serum albumin repeat homology < SA1>
F; 20-337/Pomain: serum albumin repeat homology < SA2>
F; 210-337/Pomain: serum albumin repeat homology < SA3>
F; 210-337/Pomain: serum albumin repeat homology < SA3>
F; 210-337/Pomain: serum albumin repeat homology < SA3>
F; 210-311, 114-125, 147-192, 191-200, 223-269, 268-276, 288-302, 301-312, 339-384, 383-392, 4
F; 263/Binding site: bilirubin (Lys) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                       serum albumin precursor - horse
C;Species: Bquus caballus (domestic horse)
C;Acession: 334053
R;Ho, J.X.; Hollowachuk, E.M.; Norton, E.J.; Twigg, P.D.; Carter, D.C.
Bur. J. Blochem. 215, 205-212, 1993
A;Title: X-ray and primary structure of horse serum albumin (Equus caballus) at 0.27-nm.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross references: EMBL:X84842; NID:g886484; PIDN:CAA59279.1; PID:g886485
A;Experimental source: liver
C;Comment: This protein is the major protein component in plasma. It functions as a mult
ein has 35 conserved cysteine residues.
C;Superfamily: serum albumin; serum albumin repeat homology
C;Superfamily: serum albumin; serum albumin repeat component in plasma.
F;1-18/Domain: signal sequence #status predicted <SIG>
F;19-24/Domain: propeptide #status predicted <ARP>
F;55-60/Product: serum albumin #status predicted <ARP>
F;55-60/Product: serum albumin #status predicted <ARP>
F;55-60/Product: serum albumin #status predicted <ARP>
F;50-70/Product: serum albumin paneat homology
                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: Felis silvestris catus (domestic cat)
C;Date: 19-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 20-Aug-1999
C;Accession: JG4660; S57632
Gene 169, 295-296, 1996
A;Title: Sequence of the gene encoding cat (Felis domesticus) serum albumin. A;Reference number: JG4660; MUID:96194824; PMID:8647469
A;Accession: JG4660
A;Accession: JG4660
A;Accession: JG4660
A;Residues: 1-608 <HIZ>
                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 48; DB 1; Length 607;
Pred. No. 0.32;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2; Length 608;
            DB 1; Length 607;
                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;29-202/Domain: serum albumin repeat homology <SA1>F;221-394/Domain: serum albumin repeat homology <SA2>F;413-592/Domain: serum albumin repeat homology <SA3>
        Score 48; DB 1
Pred. No. 0.32;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 48;
        82.8%;
88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82.8%;
88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match
Best Local Similarity 88.5
Query Match 82.8
Best Local Similarity 88.9
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             serum albumin precursor - cat
                                                                                                                                                                  2 HKSEVAHRF 10
                                                                                                                                                                                                           1111:1111
27 HKSEIAHRF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |||||:||||
|HKSEIAHRF 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: S34053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S57632
                                                                                                                                                                  å
                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
C.Species: Nostoc sp. PCC 7120
A.Note: Nostoc sp. PCC 7120
A.Note: Nostoc sp. strain PCC 7120
C.Saccession: AH2378
B.Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Irigu
Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tabata
DNA Res. 8, 205-213, 2001
A.Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium
A.Reference number: AB1807; MUID:21595285; PMID:11759840
                                                                                                                                                                                                                                                                                                                                                           hypothetical protein UU287 [imported] - Ureaplasma urealyticum C;Species: Ureaplasma urealyticum C;Species: Ureaplasma urealyticum C;Species: Ureaplasma urealyticum C;Species: Ureaplasma urealyticum C;Decies: Ureaplasma urealyticum C;Accession: B20200 #sequence_revision 20-Aug-2000 #text_change 20-Aug-2000 %Accession: B20200 %Accessio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GB:BA000019; PIDN:BAB76283.1; PID:g17133720; GSPDB:GN00179
A;Experimental source: strain PCC 7120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein asr4584 [imported] - Nostoc sp. (strain PCC 7120) C; Species: Nostoc sp. PCC 7120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6
                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
   Length 30;
                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T30740
Mypothetical protein 138R - Molluscum contagiosum virus 1 N;Alternate names: MC138R C;Species: Molluscum contagiosum virus 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
Score 40; DB 2;
Pred. No. 0.44;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 39.5; DE Pred. No. 4.1; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 5.5;
2; Mismatches
                                                                         2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 37;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 HKS-----EVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63.8%;
66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         68.18;
52.68;
       69.0%;
63.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 63.8
Best Local Similarity 66.7
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                         Conservative
                                                                                                                                        1 AHKSEVAHRFK 11
                                                                                                                                                                                  | |||: ||:|
AQKSELGHRYK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 HKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ::|||||
46 HAADVAHRF
                                      Similarity 7; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: DNA A; Residues: 1-93 <KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Genetic code: SGC3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Accession: AH2378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Gene: asr4584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Gene: UU287
              Query Match
                                             Best Local
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                   δλ
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Canis lupus familiaris (dog)
C;Species: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 07-May-1999
C;Accession: S29749
R;Dixon, J.M.; Sarkar, B
R;Dixon, J.M.; Sarkar, B
J. Biol. Chem. 249, 5872-5877, 1974
A;Title: Isolation, amino acid sequence and copper(II)-binding properties of peptide (1-A;Reference number: S29749; MUID:75011422; PMID:4414013
                                                                                                                                                                                                                                              A kesidues: 19-23, M'. 25-30 (ROS>
A; Residues: 19-23, M'. 25-30 (ROS>
C; Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper, c; Comment: Serum albumin is synthesized in the liver as preproalbumin. It binds copper, mones (weak bonds with these hormones promote their transfer across the membranes), thyr C; Superfamily: serum albumin; serum albumin repeat homology
C; Reywords: carrier protein; duplication; metal binding; plasma
F; 1-18/Pomain: signal sequence #status predicted <PRO>
F; 19-56/Domain: propeptide #status predicted <PRO>
F; 27-611/Product: serum albumin #status predicted <MAT>
F; 25-398/Domain: serum albumin repeat homology <SAL>
F; 25-398/Domain: serum albumin repeat homology <SAS>
F; 07-611/Product: copper (His) #status predicted
F; 08-089, 102-118, 117-128, 152-197, 196-205, 228-274, 273-281, 293-307, 306-317, 344-389, 388-397,
                                                                                                  Biochem. Biophys. Res. Commun. 78, 1060-1066, 1977
A; Title: Chicken microsomal albumin: amino terminal sequence of chicken proalbumin.
A; Reference number: A13451; MUID:78019943; PMID:911327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cerum albumin, milk-derived - Australian echidna (fragment)
C;Species: Tachyglossus aculeatus (Australian echidna)
C;Date: 09-Oct-1994 #sequence_revision 15-Oct-1994 #text_change 11-May-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                             A;Cross-references: GB:V00381; NID:g63038; PIDN:CAA23680.1; PID:g63039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 45; DB 1; Length 615; Pred. No. 1.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A.Status: preliminary
A.Molecule type: protein
A.Residues: 1-30 GRI>
C.Superfamily: serum albumin; serum albumin repeat homology
C.Stepvords: milk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: $29749
A; Status: preliminary
A; Modecule type: protein
A; Residues: 1.24 < OIX)
C; Superfamily: serum albumin; serum albumin repeat homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C, Accession: B61511
R; Teahan, C.G.; McKenzie, H.A.; Griffiths, M.
Comp. Biochem. Physiol. B 99, 99-118, 1991
A; Title: Some monotreme milk "whey" and blood proteins.
A; Reference number: A61511; MUID:92070088; PMID:1959333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 43; DB 2;
Pred. No. 0.094;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                77.6%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74.1%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 77.8
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 74.1
Best Local Similarity 70.0
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AHKSEVAHRF 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |:|||:|||:
| AYKSEIAHRY 11
                                                                         Rosen, A.M.; Geller, D.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||||:|||:
30 HKSEIAHRY 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 HKSEVAHRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         serum albumin - dog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Accession: B61511
                                                                                                                                                                                                                         A; Accession: A13451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
```

ð q ä

ö

Gaps

```
C; Date: 05-Nov-1999 #sequence_revision 05-Nov-1999 #text_change 21-Jul-2000
C; Accession: T30740
R; Senkevich, T.G; Bugert, J.J.; Sisler, J.R.; Koonin, E.V.; Darai, G.; Moss, B.
Science 273, M13-816, 1996
A; Title: Genome sequence of a human tumorigenic poxvirus: Prediction of specific host re
A; Reference number: Z20876; MUID: 96325459; PMID: 8670425
A; Reference number: Z20876; MUID: 96325459; PMID: 8670425
A; Reference number: Z20876; MUID: 96325459; PMID: 8670425
A; Scatus: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-17 <SEN>
A; Rosidues: 1-17 <SEN>
A; Conseriors: 1-17 <SEN>
A; Conseriors: 1-17 <SEN>
A; Roctein
C; Genetics: A; Note: MC138R
C; Superfamily: variola major virus 6R protein
Cuery Match
Best Local Similarity 77.8%; Pred. No. 11;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
DD 24 AHKSBYAHR 32
```

Search completed: August 29, 2003, 14:29:28 Job time : 40 secs

THIS PAGE BLANK (USPTO)

18, Appl 38, Appl 13, Appl 33, Appl 10, Appl 4, Appli 6, Appli

```
Sequence 33, Appl
Sequence 10, Appl
Sequence 4, Appli
Sequence 5928, Ap
Sequence 5928, Ap
Sequence 5931, Ap
Sequence 2, Appli
Sequence 6000, Ap
Sequence 5930, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REPRENCE: 21272-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT FILING DATE: 2002-10-18
PRIOR PEPLICATION NUMBER: 09/522,929
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 10994
SOFTWARE: Custom
SEQ ID NO 5999
                                                                                                                                                                                                                                                                                                                            APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 2272-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT FILING DATE: 2002-10-18
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2010-126
NUMBER OF SEQ ID NOS: 10994
SOFTWARE: Custom
SEQ ID NO 10524
LENGTH: 54
                                               Sequence 3
Sequence 3
Sequence 3
                         Sequence
                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 58; DB 6; I
100.0%; Pred. No. 6.6e-05;
                                US-110-425-000-37
US-110-424-999-18
US-110-424-999-138
US-110-425-000-33
US-110-429-99-13
US-110-609-346-10
US-110-609-346-4
US-110-609-346-4
US-110-609-346-8
US-110-609-346-8
US-110-609-346-8
US-110-609-346-8
US-110-609-346-8
US-110-609-346-8
US-110-609-346-8
US-110-609-346-8
US-110-609-346-8
US-10-425-000-34
US-10-273-573-10514
US-10-424-999-17
                                                                                                                                                                                     US-10-273-573-5930
                                                                                                                                                                                                            US-10-273-573-5708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                                                                                                                                     Sequence 10524, Application US/10273573 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5999, Application US/10273573 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) ORGANISM: Homo sapiens
US-10-273-573-10524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
 US-10-273-573-10524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 2
US-10-273-573-5999
  \\
 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10524, A Sequence 5999, Ap Sequence 5929, Ap Sequence 5921, Ap Sequence 5921, Ap Sequence 5925, Ap Sequence 5925, Ap Sequence 5926, Ap Sequence 26, Appl Sequence 3, Appl Sequence 3, Appl Sequence 11, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11, Appl
31, Appl
55, Appl
2, Appl
12, Appl
752, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Appli
Appli
Appl
Appl
Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                           August 29, 2003, 14:27:05; Search time 24 Seconds (without alignments) 13.562 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                     Pending_Patents_AA_New:*

(ggn2_6/ptodata/2/paa/US06_NEW_COMB.pep:*

(ggn2_6/ptodata/2/paa/US06_NEW_COMB.pep:*)

(ggn2_6/ptodata/2/paa/US07_NEW_COMB.pep:*)

(ggn2_6/ptodata/2/paa/US08_NEW_COMB.pep:*)

(ggn2_6/ptodata/2/paa/US08_NEW_COMB.pep:*)

(ggn2_6/ptodata/2/paa/US08_NEW_COMB.pep:*)

(ggn2_6/ptodata/2/paa/US08_NEW_COMB.pep:*)
            GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-273-573-5922
US-10-273-573-5922
US-10-273-573-5924
US-10-273-573-5924
US-10-273-573-5925
US-10-273-573-5925
US-10-273-573-5925
US-10-273-573-5925
US-10-273-573-5927
US-10-673-18996-26
US-10-422-262-26
US-10-422-262-26
US-10-424-999-11
US-10-424-999-11
US-10-425-000-31
US-10-408-765A-55
US-10-408-765A-55
US-10-408-765A-55
US-10-408-765A-55
                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-60-490-890-752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-60-490-149-1
US-10-424-999-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-424-999-14
                                                                                                                                                                                                         141812 seqs, 29589763 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                       OM protein - protein search, using sw model
                                                                                                                  US-09-845-726A-1_COPY_2_12
58
                                                                                                                                                                       BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Perfect score:
                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                        Database
                                                                               Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٠
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Result
```

ö

Gaps

~

```
Query Match 100.
Best Local Similarity 100.
Matches 11, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 10994
SOFTWARE: CUSTOM
SEQ ID NO 5924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        33 AHKSEVAHRFK 43
                                                                                                                                                                                                                                                            1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
NAME/KEY: DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                     US-10-273-573-5921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-273-573-5924
                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                    Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (112)..(127)
OTHER INFORMATION: SERUM ALBUMIN FAMILY SIGNATURE domain identified by eMATRIX,
OTHER INFORMATION: accession number PR00802A, p-value=2.324e-14, raw score of 12.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: (30)...(132)
OTHER INFORMATION: Serum albumin family domain identified by PFam, accession OTHER INFORMATION: name transport_prot, E-value=2.8e-10, PFam score of 47.6
                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ő
                                                                                                                                                                                                                                                                                                             APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 21272-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT APPLICATION NUMBER: 09/822,929
PRIOR APPLICATION NUMBER: 09/770,160
PRIOR PILING DATE: 2000-04-18
PRIOR FILING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 10994
SOFTWARE: Custom
SEQ ID NO 5979
LENGTH: 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 21272-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT APPLICATION NUMBER: 09/522,929
FRIOR PEPLICATION NUMBER: 09/722,929
PRIOR PELLING DATE: 2000-04-18
PRIOR PELLING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 10994
SOFTWARE: Custom
SEQ ID NO 5922
                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.0%; Score 58; DB 6; Length 133; Best Local Similarity 100.0%; Pred. No. 0.0002; Matches 11; Conservative 0; Mismatches 0; Indels
                                       100.0%; Score 58; DB 6; Length 76; 100.0%; Pred. No. 0.0001; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COCATION: (1)...(133)
CHER INFORMATION: Xaa = X or * as defined in Table 2
US-10-273-573-579-9
                                                                                                                                                                                                                                RESULT 3
US-10-273-573-5979
; Sequence 5979, Application US/10273573
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5922, Application US/10273573 GENERAL INFORMATION:
                                       Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                             1 AHKSEVAHRFK 11
                                                                                                                                                     1111111111
37 AHKSEVAHRFK 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28 AHKSEVAHRFK 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: DOMAIN
LOCATION: (112)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: DOMAIN
LOCATION: (30)..
US-10-273-573-5999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-273-573-5922
                                                                                                                             ð
                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Óγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

```
LOCATION: (120)...(135)
OTHER INFORMATION: SERUM ALBUMIN FAMILY SIGNATURE domain identified by eMATRIX,
OTHER INFORMATION: accession number PR00802A, p-value=1.000e-19, raw score of 12.
FEATURE:
NAME/KEY: DOMAIN
LOCATION: (58)..(134)
OTHER INFORMATION: Serum albumin family domain identified by PFam, accession oTHER INFORMATION: name transport_prot, E-value=0.00037, PFam score of -21.7 US-10-273-5922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : LOCATION: (35)..(153)
: OTHER INFORMATION: Serum albumin family domain identified by PFam, accession
: OTHER INFORMATION: name transport_prot, E-value=3.7e-26, PFam score of 100.3
US-10-273-573-5921
                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5921, Application US/10273573

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION:

FILE REFERENCE: 21272-066

CURRENT PAPLICATION NUMBER: US/10/273,573

CURRENT FILING DATE: 2002-10-18

PRIOR APPLICATION NUMBER: 09/722,929

PRIOR APPLICATION NUMBER: 09/770,160

PRIOR APPLICATION NUMBER: 09/770,160

PRIOR APPLICATION NUMBER: 09/770,160

NUMBER OF SEQ ID NOS: 10994

SOFTWARE: Custom

SEQ ID NO 5921

LENGTH: 156
                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5924, Application US/10273573
GENERAL INFORMATION:
APPLICANT: Hyseq, Inc.
TITLE OF INVERVIOR: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 21272-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT FILING DATE: 2000-10-18
PRIOR PALICATION NUMBER: 09/522,929
PRIOR PLILING DATE: 2000-04-18
PRIOR PLILING DATE: 2001-01-26
PRIOR FILING DATE: 2001-01-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                  ;;
0
                                                                                                                                                                                                         Length 134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 156;
                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                   Query Match 100.0%; Score 58; DB 6; Le
Best Local Similarity 100.0%; Pred. No. 0.0002;
Matches 11; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 58; DB 6; 100.0%; Pred. No. 0.00024; Live 0; Mismatches 0;
```

```
NAME/KEY: DOMAIN
LOCATION: (125)..(140)
OTHER INFORMATION: SERUM ALBUMIN FAMILY SIGNATURE domain identified by eMATRIX,
OTHER INFORMATION: accession number PR00802A, p-value=3.066e-09, raw score of 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (161)..(185)
OTHER INFORMATION: SERUM ALBUMIN FAMILY SIGNATURE domain identified by eMATRIX,
OTHER INFORMATION: accession number PR00802B, p-value=6.294e-24, raw score of 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : LOCATION: (41)..(384)
: OTHER INFORMATION: Serum albumin family domain identified by PFam, accession
: OTHER INFORMATION: name transport_prot, E-value=2.7e-102, PFam score of 353.3
US-10-273-573-5925
                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: DOMAIN
LOCATION: (41)...(230)
OTHER INFORMATION: Serum albumin family domain identified by PFam, accession
OTHER INFORMATION: name transport_prot, E-value=6.6e-26, PFam score of 99.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5925, Application US/10273573

Sequence 5925, Application US/10273573

GENERAL INFORMATION:
APPLICART: Hyseq, Inc
TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REPERENCE: 12172-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT FILING DATE: 2002-10-18
PRIOR APPLICATION NUMBER: 09/522,929
PRIOR APPLICATION NUMBER: 09/770,160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 58; DB 6; Length 289; 100.0%; Pred. No. 0.0005;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels

; LOCATION: (1) ..(289)
? OTHER INFORMATION: Xaa = X or * as defined in Table 2
US-10-273-573-5569

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 58; DB 6; Le
100.0%; Pred No. 0.00075;
viematrihes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
PRIOR APPLICATION NUMBER: 09/522,929
PRIOR FILING DATE: 2000-04-18
PRIOR FILING DATE: 2001-01-26
PRIOR FILING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 10994
SOFTWARE: Custom
SOFTWARE: Custom
LENGTH: 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 10994
SOFTWARE: Custom
SEQ ID NO 5925
LENCTH: 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 11, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              38 AHKSEVAHREK 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                              LOCATION: (130)..(154)
OTHER INFORMATION: SERUM ALBUMIN FAMILY SIGNATURE domain identified by eMATRIX,
OTHER INFORMATION: accession number PR00802B, p-value=6.294e-24, raw score of 16.51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (149)..(173)
OTHER INFORMATION: SERUM ALBUMIN FAMILY SIGNATURE domain identified by eMATRIX,
OTHER INFORMATION: accession number PR00802B, p-value=6.294e-24, raw score of 16.51

    LOCATION: (56)..(185)
    OTHER INFORMATION: Serum albumin family domain identified by PFam, accession OTHER INFORMATION: name transport_prot, E-value=6.3e-42, PFam score of 152.7 US-10-273-573-5924

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               i LOCATION: (40)..(204)

i OTHER INFORMATION: Serum albumin family domain identified by PFam, accession

i OTHER INFORMATION: name transport_prot, E-value=1.2e-71, PFam score of 251.5
US-10-273-573-5923
                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REPERENCE: 1212'-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT APPLICATION NUMBER: 09/522,929
PRIOR APPLICATION NUMBER: 09/770,160
PRIOR FILING DATE: 2000-04-18
PRIOR APPLICATION NUMBER: 09/770,160
PRIOR FILING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 10994
SOFWWARE: Custom
SEQ ID NO 5923
LENGTH: 214
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
FILE REFERENCE: 21272-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT FILING DATE: 2002-10-18
                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 58; DB 6; Length 214; 100.0%; Pred. No. 0.00035; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                          Query Match 100.0%; Score 58; DB 6; Length 192; Best Local.Similarity 100.0%; Pred. No. 0.00031; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5923, Application US/10273573 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 5569, Application US/10273573 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best_Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38 AHKSEVAHRFK 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: DOMAIN
                                                                                          NAME/KEY: DOMAIN
                                                                                                                                                                                                           NAME/KEY: DOMAIN LOCATION: (56)..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: DOMAIN
LOCATION: (40)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-273-573-5923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-10-273-573-5569
LENGTH: 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                       FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3. Application PC/TUS0319902
Sequence 3. Application PC/TUS0319902
GENERAL INFORMATION:
APPLICANT: Dyax COTPORALION
TITLE OF INVENTION: SERUM PROTEIN-ASSOCIATED TARGET-SPECIFIC
TITLE OF INVENTION: LIGANUS AND IDENTIFICATION METHOD THEREFOR
CURRENT APPLICATION NUMBER: PCT/US03/19902
CURRENT FILING DATE: 2003-06-23
PRIOR FILING DATE: 2002-06-23
NUMBER OF SEQ ID NOS: 11
SOUTHARE: FASTERQ FOR WINDOWS Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 58; DB 1; Length 585; 100.0%; Pred. No. 0.0012; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 585;
Length 550;
                                             Indels
100.0%; Score 58; DB 6; I
100.0%; Pred. No. 0.0011;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.0%; Pred. No. 0.0012;
Matches 11; Conservative 0; Mismatches 0.
                                                                                                                                                                                                                      PERONAL LANGE OF APPLICATION PC/TUS0318896

Sequence 26, Application PC/TUS0318896

GENERAL INFORMATION:
TAPLICANT: Dyax COPPORTION
TILE REFERENCE: 10280-052W01

CURRENT APPLICATION NUMBER: PCT/US03/18896
CURRENT FILING DATE: 2003-06-16

PRIOR APPLICATION UNMBER: US 60/388,642

PRIOR APPLICATION NUMBER: US 60/388,642

PRIOR APPLICATION NUMBER: US 60/388,642

PRIOR SEQ ID NOS: 430

SOFTWARE FEING DATE: 2002-06-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-10-462-262-26
US-quence 26, Application US/10462262
GENERAL INFORMATION:
APPLICANT: Sato, Marion K.
APPLICANT: Dawson, Bruce M.
TITLE OF INVENTION: PROTEIN ANALYSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 AHKSEVAHREK 12
                                                 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AHKSEVAHRFK 11
                                                                                            1 AHKSEVAHRFK 11
                                                                                                                      : Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
    Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US03-18896-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCT-US03-19902-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWALL
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 26
LENGTH: 585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: (188)..(240)
OTHER INFORMATION: Serum albumin family proteins domain identified by eMATRIX,
OTHER INFORMATION: accession number BL00212, p-value=1.000e-40, raw score of 30.19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (158)..(210)
OTHER INFORMATION: Serum albumin family proteins domain identified by eMATRIX,
OTHER INFORMATION: accession number BL00212, p-value=1.000e-40, raw score of 30.19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; IOCATION: (30)..(534)
; OTHER INFORMATION: Serum albumin family domain identified by PFam, accession
; OTHER INFORMATION: name transport_prot, E-value=1.2e-150, PFam score of 513.9
US-10-273-573-5927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCCATION: (44)...(503)
OTHER INFORMATION: Serum albumin family domain identified by PFam, accession
CHER INFORMATION: name transport_prot, E-value=2.6e-126, PFam score of 433.1
US-10-273-573-5926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5927, Application US/10273573

GENERAL INFORMATION:
APPLICANT: Hyseq, Inc
TILLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
TILLE REPERENCE: 21272-066
CURRENT APPLICATION NUMBER: US/10/273,573
CURRENT APPLICATION NUMBER: US/2002-10-18
PRIOR PILING DATE: 2000-04-18
PRIOR PELLING DATE: 2000-04-26
NUMBER OF SEQ ID NOS: 10994
SEQ ID NO 5927

LENGTH: 550

LENGTH: 550
                                                                                | Sequence 5926, Application US/10273573
| Sequence 5926, Application US/10273573
| GENERAL INFORMATION:
| APPLICANT: Hyseq, Inc
| TITLE OF INVENTION: NOVEL MACROPHAGE NUCLEIC ACIDS AND POLYPEPTIDES
| FILE REFERENCE: 21272-066
| CURRENT APPLICATION NUMBER: US/10/273,573
| CURRENT FILING DATE: 2002-10-18
| PRIOR FILING DATE: 2000-04-18
| PRIOR FILING DATE: 2000-04-18
| PRIOR FILING DATE: 2001-01-26
| NUMBER OF SEQ ID NOS: 10994
| SOFTWARE: CUSTOM
| SEQ ID NO 5926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 58; DB 6; Length 520; 100.0%; Pred. No. 0.001; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
Warches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: DOMAIN
LOCATION: (30)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-273-573-5927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

ô

```
ö
                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ## Sequence 3, Application US/10602141

| Sequence 3, Application US/10602141
| Sequence 3, Application US/10602141
| Sequence 3, Application US/10602141
| APPLICANT: Sato, Aaron K.
| APPLICANT: Edge, Albert
| TITLE OF INVENTION: SERUM PROTEIN-ASSOCIATED TARGET-SPECIFIC
| TITLE OF INVENTION: LIGANDS AND IDENTIFICATION METHOD THEREFOR
| FILE REFERENCE: 10280-058001
| CURRENT FILING DATE: 2003-06-23
| PRIOR PAPLICATION NUMBER: US 60/390,657
| PRIOR PAPLICATION NUMBER: US 60/390,657
| NUMBER OF SEQ ID NOS: 11
| SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                         ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 58; DB 6; Length 585; Best Local Similarity 100.0%; Pred. No. 0.0012; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 58; DB 6; Length 585; Best Local Similarity 100.0%; Pred. No. 0.0012; Matches 11; Conservative 0; Mismatches 0; Indels
FILE REFERENCE: 10280-052001
CURRENT APPLICATION NUMBER: US/10/462,262
CURRENT FILING DATE: 2003-06-16
FRIOR APPLICATION NUMBER: US 60/388,642
FRIOR FILING DATE: 2002-06-14
NUMBER OF SEQ ID NOS: 430
SOFTWARE: PASKERQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Search completed: August 29, 2003, 14:38:01 Job time : 25 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                            2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 3

LENGTH: 585

TYPE: PRT

ORGANISM: Homo sapiens
US-10-602-141-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AHKSEVAHRFK 11
                                                                                                                                                                                                                   TYPE: PRT
CORGANISM: Homo sapiens
US-10-462-262-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                   ŏ
```

		·
THIS PAGE BLANK (US	SPTO)	

Appli Appli Appli

Sequence 4

Appli Appli Appli Appli Appli

Sequence 3, Sequence 3, Sequence 6, Sequence 3, Sequence 3, Sequence 3, Sequence 3, Sequence 6, Sequen

Title: Perfect score:

Run on:

Sequence:

Scoring table:

Searched:

Database :

```
PCT-USO2-37136-4

US-09-678-202A-4

US-09-678-202A-4

US-09-845-726-1

US-09-845-726-1

US-10-076-071-4

US-10-076-071-4

PCT-USO0-26952-6

PCT-USO0-26952-6

PCT-USO2-04275-6

PCT-USO2-04275-6

US-09-678-202A-6

US-09-678-202A-6

US-09-678-202A-6

US-09-678-202A-6

US-09-846-347-1

US-09-846-347-1

US-10-186-168-3

US-09-846-726A-1

US-09-845-726A-1

US-09-845-726A-1

US-09-845-726A-1

US-09-845-727-1

US-09-845-727-1

US-09-846-329-1

US-09-85-548-599-599

PCT-USO2-40892-674

PCT-USO2-40892-674

PCT-USO2-40892-674

PCT-USO1-08656-5929
        533333339 0007766300 0076300 007755555 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 007766300 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776600 00776000 00776600 00776600 00776600 00776600 00776600 00776600 007766000 00776600 00776600 00776600 00776600 0077600 00776600 00776600 00776600 00776600 0077600 0077600 0077600 0077600 0077600 00776600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 0077600 00776000 0077600 0077600 0077600 00776000 00776000 0077600 0077600 00776000 0077600 00776000 00776000 00776000 00776000 007760000 00
                                                                                                                                                                                                                                                                                                                                                                                                       August 29, 2003, 14:26:35 ; Search time 378 Seconds (without alignments) 25.328 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1: 'Can2_'CALCANA_Maln:*

2: 'Can2_6'ptodata/1/paa/USO6_COMB.pep:*

2: 'Can2_6'ptodata/1/paa/USO6_COMB.pep:*

3: 'Can2_6'ptodata/1/paa/USO8_COMB.pep:*

3: 'Can2_6'ptodata/1/paa/USO8_COMB.pep:*

5: 'Can2_6'ptodata/1/paa/USO8_COMB.pep:*

5: 'Can2_6'ptodata/1/paa/USO8_COMB.pep:*

7: 'Can2_6'ptodata/1/paa/USO9_COMB.pep:*

7: 'Can2_6'ptodata/1/paa/USO9_COMB.pep:*
                 GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5580241 seqs, 870357830 residues
                                                                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                            US-09-845-726A-1_COPY_2_12
58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pending_Patents_AA_Main:*
                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                           1 AHKSEVAHRFK 11
```

Sequence 3, Appli Sequence 6, Appli Sequence 3, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 13, Appli Sequence 13, Appli Sequence 11, Appli Sequence 1, Appli Sequence 559, App Sequence 559, App Sequence 574, App Sequence 577, App

```
Sequence 4, Application PC/TUS0026952

GENERAL INFORMATION:
APPLICANT: Bar-or, David
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Winkler, James V.
TITLE OF INVENTY WINKLEY, James V.
TITLE OF INVENTY MAINER: PCT/US00/26952
CURRENT FILING DATE: 1999-10-01
EARLIER FILING DATE: 1999-10-01
EARLIER FILING DATE: 1999-10-01
EARLIER FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver: 2.1
LENGTH: 11
LENGTH: 11
LENGTH: 11
LENGTH: 11
LENGTH: 11
LENGTH: 11
LENGTH: LENGTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
PCT-US00-26952-4
PCT-US00-26952-4
```

Sequence 4, Appli Sequence 4, Appli

PCT-US00-26952-4 PCT-US02-04275-4

11

100.0

Description

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Query Match Length DB

Score 28 28

ŞO. Result

ptodata/1/paa/US100_COMB.pep:*
/ptodata/1/paa/US101_COMB.pep:*
/ptodata/1/paa/US102_COMB.pep:*
/ptodata/1/paa/US103_COMB.pep:*
/ptodata/1/paa/US104_COMB.pep:*

/cgn2_6/

/cgn2_6/ptodata/1/paa/US104_COMB.pep:³ /cgn2_6/ptodata/1/paa/US60_COMB.pep:*

PCT-US02-37136-4

```
ö
                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Bar-Or, David
APPLICANT: Curtis, C. Gerald
APPLICANT: Curtis, C. Gerald
APPLICANT: Curtis, C. Gerald
APPLICANT: Rao, Nagaraja K.R.
APPLICANT: Minkler, James V.
APPLICANT: Winkler, James V.
APPLICATON: ORGANISE: 2002-02-13
PRIOR APPLICATION NUMBER: POY-08-29
PRIOR APPLICATION NUMBER: 60/283,507
PRIOR PELING DATE: 2001-04-11
PRIOR PELING DATE: 2001-03-22
PRIOR PELING DATE: 1999-10-01
PRIOR PLING DATE: 1090-10-01
PRIOR PLING DATE: 1090-06-13
PRIOR PLING DATE: 2001-02-13
                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 58; DB 1; Length 11; 100.0%; Pred. No. 0.00068;
100.0%; Score 58; DB 1; Length 11; 100.0%; Pred. No. 0.00068;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4 Application PC/TUS0237136

GENERAL INFORMATION:
APPLICANT BAT-Or, David
FILE OF INVENTION: METHODS AND PRODUCTS FOR ORAL CARE
CURRENT APPLICATION NUMBER: PCT/US02/37136
CURRENT PEPLICATION NUMBER: PCT/US02/37136
CURRENT FILING DATE: 2002-11-19
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTING DATE: 2000-06-13
SEQ ID NO FILING DATE: 2000-06-13
SEQ ID NO FILING DATE: 2000-06-13
SEQ ID NO FILING DATE: 2000-06-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                 Indels
                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                        Sequence 4, Application PC/TUS0204275 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best_Local Similarity 100.
Matches 11; Conservative
                          Best Local Similarity 100
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AHKSEVAHRFK 11
                                                                                                               1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US02-04275-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCT-US02-37136-4
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                 q
```

```
Sequence 1, Application US/09845726
Sequence 1, Application US/09845726
GENERAL INFORMATION:
APPLICANT: Jackowski, George
TITLE OF INVENTION: BIOPOLYMER MARKER INDICATIVE OF DISEASE STATE HAVING A MOLECUL
TITLE OF INVENTION: OF 1424 DALTONS
FILLE OF INVENTION: OF 1424 DALTONS
FILLE OF INVENTION: 05 1424 DALTONS
FILLE NEFERENCE: 2132.033
CURRENT APPLICATION NUMBER: U9/09/845,726
CURRENT FILING DATE: 2001.64.30
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                           Gaps
                                                                                                                                                                                                                                                                                       APPLICANT: Cuttis, C. G.
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Crook, Wannell M.
TITLE OF INVENTYON: METAL BINDING COMPOUNDS AND USES THEREFOR
FILE REFERENCE: 1702-3
CURRENT APPLICATION NUMBER: US/09/678, 202A
CURRENT APPLICATION NUMBER: 00/157, 404
PRIOR FILING DATE: 1099-10-01
PRIOR FILING DATE: 1099-10-01
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 58; DB 23; Length 11; 100.0%; Pred. No. 0.00068; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 11;
  Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                           Indels
Score 58; DB 1; I
Pred. No. 0.00068;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

100.0%; Score 58; DB 20;
Best Local Similarity 100.0%; Pred. No. 0.00068;
Matches 11; Conservative 0; Mismatches 0;
                                           0; Mismatches
                                                                                                                                                                                                                                Sequence 4, Application US/09678202A
GENERAL INFORMATION:
APPLICANT: Bar-Or, David
  Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 11; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AHKSEVAHRFK 11
                                                                                                               1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo/sapiens
                                                                                                                                                                                                                 US-09-678-202A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-678-202A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 5
US-09-845-726-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-845-726-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ΟŻ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
Gaps
                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                            Sequence 4, Application US/10300664
GENERAL INFORMATION:
APPLICANT: Bar-Or. David
APPLICANT: Curtis, C. G
APPLICANT: Lau, Edward
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Ro, Nagarajo K.R.
APPLICANT: Grook, Wannell M.
TITLE OF INVENTION: METAL BINDING COMPOUNDS AND USES THEREFOR FILE OF INVENTION UNBER: US/10/300,664
CURRENT APPLICAND NUMBER: US/10/300,664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3. Application PC/TUS0026952
GENERAL INFORMATION:
APPLICANT: Bar-Or, David
APPLICANT: Curtis, C. G.
APPLICANT: Lau, Edward
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Rao, Series S. V.
TITLE OF INVENTION: METAL BINDING COMPOUNDS AND USES THEREFOR FILE REFERENCE: 4172-3-PCT
Query Match 100.0%; Score 58; DB 27; Length 11; Best Local Similarity 100.0%; Pred. No. 0.00068; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 58; DB 1; Length 12; Pred. No. 0.00075;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 58; DB 29; Best Local Similarity 100.0%; Pred. No. 0.00068; Matches 11; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: PCT/USO0/26952
CURRENT FILING DATE: 2000-09-30
EARLIER APPLICATION NUMBER: 60/157,404
FEARLIER FILING DATE: 1999-10-01
EARLIER FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US/09/678,202
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR APPLICATION NUMBER: 60/211,078
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PatentIN Ver. 2.1
LENGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%;
100.0%;
                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US00-26952-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCT-US00-26952-3
                                                                                                                                                                                                                                             US-10-300-664-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-300-664-4
                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                     APPLICANT: Rad, Edward
APPLICANT: Rad, Suward
APPLICANT: Minkler, James V.
APPLICANT: Winkler, James V.
APPLICANT: Crook, Wannell M.
TITLE OF INVENTION: Metal-Binding Compounds and Uses Therefor
FILE REFERENCE: 4172-3-2
CURRENT APPLICATION NUMBER: US/10/076,071
CURRENT APPLICATION NUMBER: 09/678,202
PRIOR FILING DATE: 2002-02-19
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 2001-04-11
PRIOR FILING DATE: 2001-04-11
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PATENTIN VERSION 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Cuttis, C. G.
APPLICANT: Cuttis, C. G.
APPLICANT: Lau, Edward
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Minkler, James V.
APPLICANT: Winkler, James V.
TITLE OF INVENITON: METAL BINDING COMPOUNDS AND USES THEREFOR TILLE REFERENCE: 4172-3
CURRENT APPLICATION NUMBER: US/10/186,168
CURRENT FILING DATE: 2002-06-27
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 58; DB 26;
Pred. No. 0.00068;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                               Sequence 4, Application US/10076071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Application US/10186168 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 11; Conservative 0;
                                                 Sequence 4, April 100 CENERAL INFORMATION:
APPLICANT: Bar-Or, David APPLICANT: Curtis, C. Gerald APPLICANT: Lau, Edward APPLICANT: Rao, Nagaraja K.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Bar-Or, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CONCANISM: Homo sapiens
US-10-076-071-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-186-168-4
                   US-10-076-071-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-186-168-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

Gaps

ò g

```
ö
                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Bar-Or. David
APPLICANT: Curtis, C. Gerald
APPLICANT: Lau, Edward
APPLICANT: Rao, Nagaraja K.R.
APPLICANT: Rao, Nagaraja K.R.
APPLICANT: Crook, Wannell M.
TITLE OF INVENTION: Metal-Binding Compounds and Uses Therefor CURRENT APPLICATION NUMBER: PCT/US02/04275
CURRENT FILING DATE: 2002-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 58; DB 1; Length 12; Pred. No. 0.00075;
                                                                                                                                                                                                                                                                                                                             Score 58; DB 1; Length 12;
Pred. No. 0.00075;
Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2002-02-13
PRIOR APPLICATION NUMBER: 09/678,202
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 2000-09-29
PRIOR PELING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 09/816,679
PRIOR FILING DATE: 2001-03-22
PRIOR PRILING DATE: 1001-03-22
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR PRILING DATE: 1999-10-01
PRIOR FILING DATE: 2001-06/21/078
PRIOR FILING DATE: 2001-06/21/078
PRIOR FILING DATE: 2001-06/21/078
PRIOR FILING DATE: 2001-02-13
NUMBER OF SEQ ID NOS: 9
SCFTWARE: PatentIn Version 3.0
LENGTH DATE
PRIOR APPLICATION NUMBER: 60/268,558
PRIOR FILING DATE: 2001-02-13
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin version 3.0
SEQ ID NO 3
LENGTH: 12
TYPE: PRT
ORGANISM: HOMO Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application PC/TUS0237136; GENERAL INFORMATION:
, APPLICANT: Bar-Or, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 6, Application PC/TUS0204275 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; LOCATION: (1)..(1); OTHER INFORMATION: ACETYLATION PCT-US02-04275-6
                                                                                                                                                                                                                                                                                                                                 Ouery Match 100.0%;
Best Local Similarity 100.0%;
Matches 11; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US02-37136-3
                                                                                                                                                                                                                                                                    PCT-US02-04275-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŏλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: CUITLIS, C. GETAID
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Winkler, James V.
APPLICANT: Winkler, James V.
APPLICANT: Winkler, James V.
APPLICANT: Minkler, James V.
TITLE OF INVENTION: Metal-Binding Compounds and Uses Therefor FILE REFERENCE: 4172-3-2-PCT
CURRENT APPLICATION NUMBER: PCT/USO2/04275
CURRENT FILING DATE: 2002-02-13
PRIOR APPLICATION NUMBER: 09/678,202
PRIOR APPLICATION NUMBER: 06/283,507
PRIOR FILING DATE: 2001-04-11
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 60/283,507
PRIOR PELING DATE: 1999-10-01
PRIOR FILING DATE: 2000-06-13
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: BATTLOW:
APPLICANT: BATTLOW:
APPLICANT: Curtis, C. G.
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Lau, Nagarajo K.R.
APPLICANT: Winkler, James V.
TITLE OF INVENTION: METAL BINDING COMPOUNDS AND USES THEREFOR
FILE REFERENCE: 4172-3-FCT
CURRENT APPLICATION NUMBER: PCT/USO0/26952
CURRENT FILING DATE: 2000-09-30
EARLIER FILING DATE: 1999-10-01
EARLIER FILING DATE: 1999-10-01
EARLIER FILING DATE: 1999-10-01
EARLIER FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTIN VOI. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;;
0
                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: variant PCT-US00-26952-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 58; DB 1; Length 12;
Pred. No. 0.00075;
Mismatches 0; Indels
                Indels
                ö
                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application PC/TUS0204275
GENERAL INFORMATION:
APPLICANT: Bar-Or, David
APPLICANT: Curtis, C. Gerald
                                                                                                                                                                                                                                                                           PCT-US00-26952-6; Sequence 6, Application PC/TUS0026952; GENERAL INFORMATION:
                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 100.0%;
Matches 11; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: ACETYLATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 AHKSEVAHRFK 12
                                                                                                                      2 AHKSEVAHRFK 12
                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
PCT-US02-04275-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                Matches
```

ð g ö

Gaps

Gaps ö

Indels

us-09-845-726a-1_copy_2_12.rapm

```
100.0%; Score 58; DB 20; Length 12; 100.0%; Pred. No. 0.00075;
                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Search completed: August 29, 2003, 14:37:29
Job time : 439 secs
    PRIOR APPLICATION NUMBER: 60/157,404
PRIOR FILING DATE: 1999-10-01
PRIOR PRICATION NUMBER: 60/211,078
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOPTWARE: PatentIN Ver. 2.1
SEQ ID NO 3
LENGTH: 12
TYPE: PRT
                                                                                                                                                                                                                                                                                   Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                         US-09-678-202A-3
                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                        οχ
                                                                                                                                                                                                                                                                                                                                                                                              ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Bar-Or. David
APPLICANT: Curtis, C.G.
APPLICANT: Curtis, C.G.
APPLICANT: Cau, Edward
APPLICANT: Rao, Nagarjo K.R.
APPLICANT: Winkler, James V.
APPLICANT: Crook, Wannell M.
TITLE OF INVENTION: METAL BINDING COMPOUNDS AND USES THEREFOR FILE REFERENCE: 4172-3
CURRENT APPLICATION UNMBER: US/09/678,202A
CURRENT FILING DATE: 2000-09-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 58; DB 1; Length 12; 100.0%; Pred. No. 0.00075;
                                                                                                                                                                                                                                                                                                                                                      Length 12;
                                                                                                                                                                                                                                                                                                                                             Ouery Match 100.0%; Score 58; DB 1; Length 12 Best Local Similarity 100.0%; Pred. No. 0.00075; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application PC/TUS0237136
GENERAL INFORMATION:
APPLICANT: Bar-Ov. David
TITLE OF INVENTION: METHODS AND PRODUCTS FOR ORAL CARE
FILE REFRENCE: 4772-75-PCT
CURRENT PAPLICATION NUMBER: PCT/US02/37136
CURRENT FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 2000-06-13
PRIOR FILING DATE: 2000-06-13
SEQ ID NO 5 SEQ ID NOS: 6
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 6
LENGTH: 12
LENGTH: 12
CENGTH: PRT
CORANISM: HOMO Sapiens
; TITLE OF INVENTION: METHODS AND PRODUCTS FOR ORAL CARE; CILE REFERENCE: 4172-75-PCT; CURRENT APPLICATION NUMBER: PCT/USO2/37136; CURRENT FILING DATE: 2002-11-19; PRIOR FILING DATE: 1999-10-01; PRIOR FILING DATE: 1999-10-01; PRIOR FILING DATE: 1090-10-01; PRIOR FILING DATE: 2000-06-13; NUMBER OF SEQ ID NOS: 6; SOFWARE: Patentin Ver. 2.1; SOFWARE: 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/09678202A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ) OTHER INFORMATION: ACETYLATION PCT-US02-37136-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
PCT-US02-37136-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: MOD_RES
LOCATION: (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCT-US02-37136-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
US-09-678-202A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
```

THIS PAGE BLANK (USPTO)

```
August 29, 2003, 14:28:50; Search time 56 Seconds (without alignments) 26.868 Million cell updates/sec
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                  510680 seqs, 136781880 residues
                                                                          OM protein - protein search, using sw model
                                                                                                                                                                                          US-09-845-726A-1_COPY_2_12
58
                                                                                                                                                                                                                                                                                      BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                             1 AHKSEVAHRFK 11
                                                                                                                                                                                                                          Perfect score:
                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                     Run on:
```

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries seq length: 0 seq length: 2000000000 Minimum DB s Maximum DB s

Published_Applications_AA:* Database

6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:* 6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:* 6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:* /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:* ptodata/2/pubpaa/US10C_PUBCOMB.pep:* /cgn2_6/ptcdata/2/puppaa/vsvv_..._.BDB.pep:*/cgn2_6/ptcdata/2/pubpaa/US07_NEW_PUB.pep:*/cgn2_6/ptcdata/2/pubpaa/PCTUS_PUBCOMB.pep:*/ /cgn2_6/ptodata/2/pubpaa/0508_NEW_PUB.pep.* /cgn2_6/ptodata/2/pubpaa/0508_PUBCOMB.pep:* /cgn2_6/ptodata/2/pubpaa/0509A_PUBCOMB.pep:* /cgn2_6/ptodata/2/pubpaa/0509A_PUBCOMB.pep:* ptodata/2/pubpaa/US09_NEW_PUB.pep:* /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:* /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:* /cgn2_6/ptodata/2/pubpaa/USO7_PUBCOMB.pep:* /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:* /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:* /cgn2_6/

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

/cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Appli Appli Sequence Sequence Sequence Description Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence US-09-845-727-1 US-09-846-328-1 US-09-846-329-1 US-09-845-726-1 us-10-300-664-6 US-09-846-347-US-09-845-764-SUMMARIES Match Length DB 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 Query Score Result Š

•	
Sequence 24, Appl Sequence 27, Appl Sequence 24, Appl Sequence 26, Appl Sequence 16, Appl Sequence 17, Appl Sequence 5, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 2, Appli Sequence 133, Appli Sequence 134, Appli Sequence 135, Appli Sequence 165, Appli	Sequence 131, App
US-10-074-956-24 US-10-074-956-27 US-10-074-956-28 US-09-929-552-2 US-09-932-613-445 US-09-984-010-26 US-09-984-010-26 US-09-984-010-36 US-10-153-04A-5 US-10-153-04A-7 US-10-153-06A-7 US-10-153-06A-7 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-237-667-2 US-10-153-604A-133 US-10-153-604A-133 US-10-153-604A-132 US-10-153-604A-132 US-10-153-604A-132 US-10-153-604A-132 US-10-153-604A-132 US-10-153-604A-132 US-10-153-604A-132 US-10-153-604A-132 US-10-153-604A-135 US-10-153-604A-135	US-10-153-604A-131
44444444444444444444444444444444444444	12
241195 241195 28688 5885 5885 5885 5885 5885 5885 6009 6009 6009 6010 6100 6100 6100 6100	653
	100.0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28
11112222222222222222222222222222222222	45

ALIGNMENTS

```
Sequence 1, Application US/09845726
Patent No. US20020160417A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: BIOPOLYMER MARKER INDICATIVE OF DISEASE STATE HAVING A MOLECUL
TITLE OF INVENTION: OF 1424 DALTONS
FILE REFERENCE: 2132.033
CURRENT APPLICATION NUMBER, US/09/845,726
CURRENT FILING DATE: 2004-04-30
                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 58; DB 10; Length 11; 100.0%; Pred. No. 0.00024; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                  ion 3.1
                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-09-845-726-1
                                                                                                                                                                                                                        SEQ ID NOS: 1
                                                                                                                                                                                                                                                      PatentIn ver
US-09-845-726-1
                                                                                                                                                                                                                                                                                                  LENGTH: 11
                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                           NUMBER OF
SOFTWARE:
                                                                                                                                                                                                                                                                         SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
```

Best Local Similarity 100. Matches 11; Conservative 1 AHKSEVAHRFK 11 1 AHKSEVAHRFK 11 δ

ö

Gaps

ö

Sequence 4, Application US/10300664 Publication No. US20030158111A1 GENERAL INFORMATION: APPLICANT: Bar-Or, David
APPLICANT: Curtis, C. G.
APPLICANT: Lau, Edward
Lau, Edward
APPLICANT: Rao, Nagarajo K.R.
APPLICANT: Winkler, James V. US-10-300-664-4

Sequence

```
Sequence 3, Application US/10300664; Publication No. US20030158111A1; GENERAL INFORMATION: APPLICANT: Bar-Or, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4
LENGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT; ORGANISM: Homo sapiens
US-10-186-168-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-300-664-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-846-347-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-846-347-1
                                          US-10-186-168-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 1
LENGIH: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                   ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Rao, Nagaraja K.R.
APPLICANT: Winkler, James V.
APPLICANT: Winkler, Wetal-Binding Compounds and Uses Therefor FILE REFERENCE: 4172-3-2
CURRENT APPLICATION NUMBER: 09/78,202
PRIOR PILING DATE: 2000-09-29
PRIOR PILING DATE: 2001-04-11
PRIOR PILING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR PILING DATE: 1999-10-01
PRIOR PLING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR PLING DATE: 10909-10-01
PRIOR FILING DATE: 2001-02-13
PRIOR PLING DATE: 2001-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
APPLICANT: Crook, Wannell M.
TITLE OF INVENTION: METAL BINDING COMPOUNDS AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                    Query Match
100.0%; Score 58; DB 12; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.00024;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 58; DB 15;
100.0%; Pred. No. 0.00024;
Live. 0; Mismatches 0;
                                                   CURRENT APPLICATION NUMBER: US/10/300,664
CURRENT FILING DATE: 2002-11-19
PRIOR APPLICATION NUMBER: US/09/678,202
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTIN VET: 2.1
SOFTWARE: PATENTIN VET: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4, Application US/10076071
Publication No. US20030060408A1
GENERAL INFORMATION:
APPLICANT: Bar-Or, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.(
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens US-10-076-071-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 9
                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                        FILE REFERENCE: 4172-3
                                                                                                                                                                                                                                                                                                                                   ; OKGANISM: HOUS-10-300-664-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-076-071-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
                                                                                                                                                                                                                                                                                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Curtis, C. Gerald
APPLICANT: Lau, Edward
APPLICANT: Lau, Edward
APPLICANT: Man, Nagaraja K.R.
APPLICANT: Winkler, James V.
APPLICANT: Crook, Wannell M.
TITLE OF INVENTION: Metal-Binding Compounds and Uses Therefor CURRENT APPLICATION NUMBER: US/10/076,071
CURRENT FILING DATE: 2002-02-13
                                                                                                                                                APPLICANT: Bar-Or, David
APPLICANT: Curtis, C. Gerald
APPLICANT: Lau, Edward
APPLICANT: Rao, Nagaraja K.R.
APPLICANT: Winkler, James V.
APPLICANT: Winkler, James V.
APPLICANT: Nannell M.
APPLICANT: PANNEY WANNELL M.
FILLE OF INVENTION: Metal-Binding Compounds and Uses Therefor FILE REFERENCE: 4172-3-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 58; DB 15; 100.0%; Pred. No. 0.00026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/076,071 CURRENT FILING DATE: 2002-02-13 PRIOR APPLICATION NUMBER: 09/678,202
                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/283,507
PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION NUMBER: 09/816,679
PRIOR FILING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR FILING DATE: 1999-10-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-04-11
PRIOR APPLICATION UNBER: 09/816,679
PRIOR FILING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: 60/157,404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/211,078
PRIOR FILING DATE: 2000-06-13
PRIOR APPLICATION NUMBER: 60/268,558
PRIOR FILING DATE: 2001-02-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2002-02-13
PRIOR APPLICATION NUMBER: 09/678,202
PRIOR FILING DATE: 2000-09-29
PRIOR APPLICATION NUMBER: 60/283,507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 1999-10-01
PRIOR APPLICATION NUMBER: 60/157,404
PRIOR FILING DATE: 1999-10-01
PRIOR APPLICATION NUMBER: 60/211,078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 9
US-10-076-071-6
Sequence 6, Application US/10076071
Publication No. US20030060408A1
GENERAL INFORMATION:
APPLICANT: Bar-Or, David
                                                                            Sequence 3, Application US/10076071 Publication No. US20030060408A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 9 SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                            RESULT 8
JS-10-076-071-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-076-071-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application US/10300664

Publication No. US20030158111A1

GENERAL INFORMATION:

APPLICANT: Bar-Or, David

APPLICANT: Lau, Edward

APPLICANT: Rao, Nagarajo K.R.

APPLICANT: Rao, Nagarajo K.R.

APPLICANT: Winkler, James V.

APPLICANT: Grook, Wannell M.

TITLE OF INVENTION: WEAL BINDING COMPOUNDS AND USES THEREFOR FILE REFERENCE: 4172-3

CURRENT APPLICATION NUMBER: US/10/300,664

CURRENT APPLICATION NUMBER: US/09/678,202

PRIOR PILING DATE: 2002-11-19

PRIOR FILING DATE: 1999-10-01

PRIOR PLICATION NUMBER: 60/157,404

PRIOR PLILING DATE: 1999-10-01

PRIOR PLILING DATE: 2000-06-13

PRIOR PLILING DATE: 2000-06-13
                                                                                         APPLICANT: CTOOK, Wannell M.
ITLE OF INVENTION: METAL BINDING COMPOUNDS AND USES THEREFOR FILE REFERENCE: 4172-3
CURRENT APPLICATION WUMBER: US/10/300,664
CURRENT FILING DATE: 2002-11-19
PRIOR PPLICATION NUMBER: US/09/678,202
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR PLICATION NUMBER: 60/211,078
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1090-10-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTIN VOT: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 58; DB 12; Best Local Similarity 100.0%; Pred. No. 0.00026; Matches 11; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.0%; Score 58; DB 12; Best Local Similarity 100.0%; Pred. No. 0.00026; Matches 11; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; OTHER INFORMATION: ACETYLATION US-10-300-664-6
Curtis, C. G.
Lau, Edward
Rao, Nagarajo K.R.
                                                                         Winkler, James V.
Crook, Wannell M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 6
LENGTH: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT; ORGANISM: Homo sapiens US-10-300-664-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                     Q ID NO 3
LENGTH: 12
```

ò

a õ

```
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Jackowski, George
TITLE OF INVENTION: BIOPOLYMER MARKER INDICATIVE OF DISEASE STATE HAVING A MOLECUL
TITLE OF INVENTION: OF 1521 DALTONS
TITLE REFERENCE: 2132.037
CURRENT APPLICATION NUMBER: US/09/845,764
CURRENT FILING DATE: 2001-04-30
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.1
LENGTH: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09845727
Petent No. US20020160418A1
GENERAL INFORMATION:
APPLICANT: Jackowski, George
TITLE OF INVENTION: BIOPOLYMER MARKER INDICATIVE OF DISEASE STATE HAVING A MOLECUL,
FILLE OF INVENTION: OF 1949 DALTONS
FILLE REFERENCE: 2132.047
CURRENT APPLICATION NUMBER: US/09/845,727
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
             TITLE OF INVENTION: METAL BINDING COMPOUNDS AND USES THEREFOR FILE REFERENCE: 4172-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 58; DB 16; 100.0%; Pred. No. 0.00026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 58; DB 10;
100.0%; Pred. No. 0.00029;
ilve 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                 CURRENT APPLICATION NUMBER: US/10/186,168
CURRENT FILING DATE: 2002-06-27
PRIOR FILING DATE: 2002-06-29
PRIOR FILING DATE: 2000-09-29
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 1999-10-01
PRIOR FILING DATE: 2000-06-13
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 1, Application US/09845764
; Patent No. US20020160958A1
                                                                                                                                                                                                                                                                                                                                                                                            ; LOCATION: (1); OTHER INFORMATION: ACETYLATION US-10-186-168-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens
US-09-845-764-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best_Local Similarity
Matches 11; Conserva
                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: MOD_RES
LOCATION: (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-845-764-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-845-727-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                             FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δŽ
                                                                                                                                                                                                                                                                                                                                                                            ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3. Application US/10186168

Publication No. US20030130185A1

GENERAL INFORMATION:

APPLICANT: Bar-Or, David

APPLICANT: Lau, Edward

APPLICANT: Lau, Edward

APPLICANT: Rao, Nagarajo K.R.

APPLICANT: Rao, Nagarajo K.R.

APPLICANT: Crook, Wannell M.

ITILE OF INVENTION: WETAL BINDING COMPOUNDS AND USES THEREFOR FILE REPERENCE: 4172-3

CURRENT APPLICATION NUMBER: US/10/186,168

CURRENT APPLICATION NUMBER: US/209/678,202

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 2000-09-29

PRIOR FILING DATE: 2000-06-13

PRIOR FILING DATE: 2000-06-13

PRIOR FILING DATE: 2000-06-13

NUMBER OF SEQ ID NOS: 6

SOFTWARE: PLENCENTION VET: 2.1

SERVICENTION OF SEQ ID NOS: 6

SOFTWARE: PLENCENTION VET: 2.1

SERVICENTION OF SEQ ID NOS: 6

SOFTWARE: PLENCENTION VET: 2.1
                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                    Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 12;
                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                             Score 58; DB 15;
Pred. No. 0.00026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 58; DB 16;
100.0%; Pred. No. 0.00026;
Live 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
PRIOR FILING DATE: 2000-06-13
PRIOR APPLICATION NUMBER: 60/268,558
PRIOR FILING DATE: 2001-02-13
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PATENTIN VEFSION 3.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6, Application US/10186168
Publication No. US20030130185A1
GENERAL INFORMATION:
APPLICANT: Bar-or, David
APPLICANT: Curtis, C. G.
APPLICANT: Lau, Edward
APPLICANT: Wao, Nagarajo K.R.
APPLICANT: Winkler, James V.
APPLICANT: Crook, Wannell M.
                                                                                                                                                                                                                                      , LOCATION: (1)..(1); OTHER INFORMATION: ACETYLATION US-10-076-071-6
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0%;
Matches 11; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 AHKSEVAHRFK 12
                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapiens
                                                                                                                                                                                                                    NAME/KEY: MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
US-10-186-168-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-186-168-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
```

Gaps

ö

Gaps

```
Sequence 1, Application US/09846328

Patent No. US20020160531A1
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: BIOPOLYMER MARKER INDICATIVE OF DISEASE STATE HAVING A MOLECULAR
TITLE REPRINCATION: OF 2753 DALTONS
TITLE REPRENCE: 2132.051
CURRENT APPLICATION NUMBER: US/09/846,328
CURRENT FILING DATE: 2001-04-30
SUPPRABE OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/09846329

Patent No. US20020161177A1

Patent No. US20020161177A1

ADDALL INFORMATION: US20020161177A1

ADDALL INFORMATION: BLOPOLYMER Marker Indicative of Disease State Having A Molecular TITLE OF INVENTION: 0f 2937 Daltons

FILE OF INVENTION: 0f 2937 Daltons

FILE REPERBNCE: 2132.052

CURRENT FILITE DATE OF INVENTION NUMBER: US/09/846,329

CURRENT FILITE DATE OF INVENTION NUMBER: 2001-04-30

NUMBER OF SEQ ID NOS: 1

SOFTWARE: PatentIn version 3.1
                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                    Gaps
                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                Ouery Match
Best Local Similarity 100.0%; Score 58; DB 10; Length 17;
Best Local Similarity 100.0%; Pred. No. 0.00038;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 100.0%; Score 58; DB 10; Length 24; I Similarity 100.0%; Pred. No. 0.00054; 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.0%; Score 58; DB 10; Length 26; Best Local Similarity 100.0%; Pred. No. 0.00059; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Search completed: August 29, 2003, 14:39:04 Job time : 56 secs
                                                                                                                                                                                                                                     2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 AHKSEVAHREK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 AHKSEVAHRFK 12
                                                                                                                                                                                                             1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
; LENGTH: 17
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-845-727-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 24
TYPE: PRT
ORGANISM: Homo sapiens
US-09-846-328-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
; ORGANISM: Homo sapiens
US-09-846-329-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                        RESULT 14
US-09-846-328-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-846-329-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 1
LENGTH: 26
                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

THIS PAGE BLANK (USPTO)

```
Sequence 1, Applications of the property of th
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 73,
Sequence 11,
Sequence 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: U.S.A.

21P: 20037

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM:

PC/DOS/MS-DOS

SOFTWARE: Patchill Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/803 ?f.

FILING DATE:

CLASCITITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 7, Application US/08803364
Patent No. 5864014
GENERAL INFORMATION:
APPLICANT: FASANO, Alessio
TITLE OF INVENTION: ZONULA OCCLUDENS TOXIN RECEPTOR
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: SUGHRUE, MION, ZINN, MACPEAK & SEAS STREET: 2100 Pennsylvania Avenue, N.W., Suite 800 CITY: Washington, D.C. STATE: D.C. COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                           US-09-252-991A-29283
US-09-252-991A-27825
US-09-171-461-28
US-08-311-731A-73
US-08-647-960-11
US-08-311-731A-196
                        US-08-041-774-1
US-08-530-340-7
US-08-469-856-9
US-09-312-762A-4
US-09-132-762A-4
US-09-134-001C-5307
US-09-134-001C-5307
US-09-165-961-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 58; DB 2; I
ilarity 100.0%; Pred. No. 6.9e-05;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                     US-09-165-581-2
US-09-328-352-4977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: KIT, Gordon
REGISTRATION NUMBER: 30,764
REFERENCE/DOCKET NUMBER: A-6888
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (202) 293-7060
TELEFAX: (202) 293-7860
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-803-364-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-803-364-7
   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Appli
Appli
Appli
Appli
Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Appl
Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Appl
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Appl
Appli
                                                                                                                                                                                    August 29, 2003, 14:25:40; Search time 29 Seconds (without alignments) 16.049 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7,
Sequence 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2
Sequence 3
Sequence 2
Sequence 2
Sequence 4
Sequence 1
Sequence 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1
Sequence 1
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /cgn2_6/ptodata/1/laa/5A_COMB.pep:*
/cgn2_6/ptodata/1/laa/5B_COMB.pep:*
/cgn2_6/ptodata/1/laa/6A_COMB.pep:*
/cgn2_6/ptodata/1/laa/6B_COMB.pep:*
/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/laa/PCTUS_COMB.pep:*
                        GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-186-409-13
US-08-188-409-13
US-08-984-116-12
US-08-984-116-12
US-08-702-572-2
US-08-702-746-2
US-08-703-74-4
US-08-797-689-12
US-08-797-689-12
US-08-134-196A-7
US-08-134-196A-7
US-08-134-196A-7
US-08-134-6
US-08-134-6
US-08-134-6
US-08-134-6
US-08-134-6
US-08-134-6
US-08-134-6
US-08-134-6
US-08-134-6
US-08-1803-364-6
US-08-1803-364-6
US-08-186-196A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5-09-024-198-13
5-09-186-409-13
5-08-153-799-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JS-09-186-409-10
JS-08-448-196A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             328717 seqs, 42310858 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                    - protein search, using sw model
                                                                                                                                                                                                                                                                                  US-09-845-726A-1_COPY_2_12
58
                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
Gapop 10.0 , Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Issued_Patents_AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                   1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
Match 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM protein
                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database
                                                                                                                                                                                          on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š.
```

Gaps

1 AHKSEVAHRFK 11

g

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 58; DB 2; Length 13; 100.0%; Pred. No. 6.9e-05; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                   APPLICANT: FASANO, Alessio
APPLICANT: FASANO, Alessio
TITLE OF INVENTION: ZONULA OCCLUDENS TOXIN RECEPTOR
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
ADDRESSEE: SUGRNE, MION, ZINN, MACPEAK & SEAS
STREET: 2100 Pennsylvania Avenue, N.W., Suite 800
CITY: Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
US-09-186-409-13
Sequence 13, Application US/09186409
Patent No. 5948629
GENERAL INFORMATION:
APPLICANT: FASANO, Alessio
TITLE OF INVENTION: ZONULA OCCLUDENS TOXIN RECEPTOR
NUMBER OF SEQUENCES: 18
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: SUGHRUE, MION, ZINN, MACPEAK & SEAS STREET: 2100 Pennsylvania Avenue, N.W., Suite 800 CITY: Washington, D.C.
                                                                                                                                                                                                                                                                               ZIP: 20037
CMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
GURREWA APPLICATION DATA:
APPLICATION NUMBER: US/09/024,198
FILING DATE: 17 FEB 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: KIT, GOLDON
REGISTRATION NUMBER: 30,764
REFERENCE/DOCKET NUMBER: A-6988
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 293-7660
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/803,364
FILING DATE: 20 FEB 1997
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
            US-09-024-198-13; Sequence 13, Application US/09024198; Patent No. 5912323; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.S.A.
ZIP: 20037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 13 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: pepti
HYPOTHETICAL: NO
1-024-100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                  U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                  COUNTRY: II CZIP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Wash:
STATE: D.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-024-198-13
RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/151 700
FILING DATE:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/186,409
FILING DATE: 5 NOV 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 58; DB 2; 100.0%; Pred. No. 6.9e-05; iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Ballance, David J
APPLICANT: Goodey, Andrew R
TITLE OF INVENTION: Polypeptides
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: R Hain Swope, BOC Health Care Inc
STREET: 100 Mountain Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/847975
FILING DATE: 06-MAR-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 8909916.2
FILING DATE: 29-APR-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GB90/00650
                                                                                                FILING DATE: 5 NOV 1998
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/024,198
FILING DATE: 17 FEB 1998
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/803,364
FILING DATE: 20 FEB 1997
CLASSIFICATION:
ATTORNEY, AGENT INFORMATION:
NAME: KIT, GORDON
REGISTRATION NUMBER: 30,764
REFERENCE/DOCKET NUMBER: A-7306
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 14, Application US/08153799
Patent No. 5766883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 07974

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (202) 293-7060
TELEFAX: (202) 293-7060
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Murray Hill
STATE: New Jersey
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-153-799-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: CARTER, DANIEL C

APPLICANT: HO, JOSEPH X

APPLICANT: OF INVENTION: OXYGEN-TRANSPORTING ALBUMIN-BASED BLOOD REPLACEMENT

TITLE OF INVENTION: OXYGEN-TRANSPORTING ALBUMIN-BASED BLOOD REPLACEMENT

TITLE OF INVENTION: OXYGEN-TRANSPORTING ALBUMIN-BASED BLOOD REPLACEMENT

TITLE OF INVENTION: OXYGEN-TRANSPORTING ALBUMIN-BASED BLOOD NOLUME EXPANDER

FILE REFERENCE: 08/984,176

CURRENT FILING DATE: 1977-12-03

NUMBER OF SEQ ID NOS: 1

SEQ ID NO 1

LENGTH: 585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2, Application US/08702572;
Patent No. 2965386;
GENERAL INFORMATION:
APPLICANT: Rerry-Williams, Sean M
APPLICANT: Glibert, Sarah C
TITLE OF INVENTION: Yeast Strains and Modified Albumins
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSE: Centeon L.L.C.
STREPT: 1020 First Avenue
STREPT: Ring of Prussia
STATE: Pennsylvania
STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 58; DB 2; Length 585; 100.0%; Pred. No. 0.0041; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                   Length 585;
                                                                                                                                                                                                                                                                                                              100.0%; Score 58; DB 1;
100.0%; Pred. No. 0.0041;
tive 0; Mismatches 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/08984176
Patent No. 5948609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MicroSoft Word 6.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: MS-DOS
                            TELEFAX: 205-544-0258
INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS: LENGTH: 585 amino acids TYPE: amino acid TOPOLOGY: linear MOLECULE TYPE: protein HYPOTHERICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Floppy disk
                                                                                                                                                                                                                   ANTI-SENSE: NO FRAGMENT TYPE: N-terminal
              205-544-0021
                                                                                                                                                                                                                                                                                                              Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                        1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
CORGANISM: Homo sapiens
US-08-984-176-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19406-1310
           TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE:
                                                                                                                                                                                                                                                                 US-08-448-196A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-984-176-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-702-572-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/08448196A

Sequence 3, Application US/08448196A

Patent No. 5780594

GENERAL INFORMATION:
APPLICANT: CARTER, DANIEL C.
TITLE OF INVENTION: BIOLOGICALLY ACTIVE PROTEIN FRAGMENTS
TITLE OF INVENTION: CONTAINING SPECIFIC BINDING REGIONS OF SERUM ALBUMIN OR TITLE OF INVENTION: RELATED PROTEINS
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: NASA
STREET: MARSHALL SPACE FLIGHT CENTER
CITY: HINTSVILLE
STATE: ALABAMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 100.0%; Score 58; DB 1; Length 585; 1 Similarity 100.0%; Pred. No. 0.0041; 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: Region
LOCATION: 369.419
OCHER INFORMATION: /note= "Alternative C-termini of
OTHER INFORMATION: HSA(1-n)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "Amino acid sequence of natural HSA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATUG SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 23-MAY-1995
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 530
ATTONNEY/AGENT INFORMATION:
NAME: BROAD JR., ROBERT L.
REGISTRATION NUMBER: 18,757
REFERENCE/DOCKET NUMBER: XX/MFS-28402-2
TELECOMMUNICATION INFORMATION:
FILING DATE: 26-APR-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/775952
FILING DATE: 29-OCT-1991
ATTORNEY/AGENT INFORMATION:
NAME: Swope, R Hain
REGISTRATION NUMBER: 24864
REFERENCE/DOCKET NUMBER: 92H832
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 665 2400
TELEFAX: (908) 771 6159
                                                                                                                                                                                                                                                       TELEX: 219484
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 585 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: Region
LOCATION: 1.585
CHER INFORMATION: OTHER INFORMATION: US-08-153-799-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 5
US-08-448-196A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
```

qq ò

```
SS: unknown
unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                 Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: unknown
MOLECULE TYPE: protein
US-08-222-619-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1111111111
26 AHKSEVAHRFK 36
                                                                               1 AHKSEVAHRFK 11
                                                                                                        NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Garden City
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-433-037-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE:
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              рp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Sonnenschein, Carlos
APPLICANT: Soto, Ana M.
TITLE OF INVENTION: Inhibiting Proliferation of Cancer Cells
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 58; DB 2; Length 585; Best Local Similarity 100.0%; Pred. No. 0.0041; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER READABLE FORM:
COMPUTER: ENDRY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/769,746
FILING DATE: 19-DEC-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Carroll, Peter G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: 32,837
REFERENCE/DOCKET NUMBER: 32,837
REFERENCE/DOCKET NUMBER: 32,837
TELEPHONE: (415) 705-8410
TELEPHONE: (415) 705-8410
TELEPHONE: (415) 707-8338
INFORMATION FOR SEO ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENOTH: S85 anino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States of America
                                                                         PRICATION 1943.

PRICATION 1943.

APPLICATION DATA.

FILING DATE. 1-AMR-1995.

APPLICATION NUMBER. WO 95/23857

FILING DATE. 1-AMR-1995

ATTORNEY/AGENT INFORMATION:

NAME: Naomi Biswas

REGISTRATION NUMBER: 38,384

REFERENCE/DOCKET NUMBER: CE0114 US

TELECHONICATION INFORMATION:

TELECHONE: 610/878/4294

TELECHONE: 610/878/4221

INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 585 amino acids

TYPE: millored acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      California
: United States of America
               UNBER: US/08/702,572
11-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/08769746 Patent No. 6274305
  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                              ; MOLECULE TYPE: protein US-08-702-572-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; MOLECULE TYPE: protein US-08-769-746-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AHKSEVAHRFK 12
                      APPLICATION NUMBER:
FILING DATE: 11-NO'
CLASSIFICATION: 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
US-08-769-746-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
```

```
Govery watch

Matches 111 Conservative 0. Mismatches 0; Indels 0: Gaps 0;

Matches 111 Conservative 0. Mismatches 0; Indels 0: Gaps 0;

MAKSPANHER 12

RESUL 9

2 AMKSDAHER 12

RESUL 9

1 Sequence 3. APPLICANT: Lichenseth Henri APPLICANT: Lichenseth Henri APPLICANT: Lichenseth Henri APPLICANT: Lichenseth Henri APPLICANT: Warfel, Samel 1 TITLE OF INVESTORS 3: Gaseband 2: APPLICANT: Lichenseth Henri APPLICANT: Mariel APPLICANT: Mariel APPLICANT: Mariel APPLICANT: Mariel APPLICANT: Lichenseth Henri APPLICANT: Mariel APPLICANT: Mar
```

```
Sequence 2. Application US/08797689

Patent No. 5876969

GENERAL INFORMATION:
APPLICANT: Fleer, Reinhard
APPLICANT: Guitton, Jean-Dominique
APPLICANT: Jung, Gerard
APPLICANT: Jung, Gerard
APPLICANT: Jung, Patrice
TITLE OF INVENTION: NOVEL BIOLOGICALLY ACTIVE POLYPEPTIDES,
TITLE OF INVENTION: ONATAINING SAID POLYPEPTIDES
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rhone-Poullenc Rorer Inc.
STREET: SOR Arcola Road, 3C43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION:
PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
FILING DATE:
CLASSIFICATION:
PRAMATION FOR
                                                                       E: Amgen Center, Patent Operations/RRC 1840 DeHavilland Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OCHIONIC MACHICAL CONTROL OPERATING SYSTEM 7.1
SOFTWARE: Word 5.1 (Patentin)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/797,689
FILING DATE: 31-JAN-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/256,927
FILING DATE: 28-JUL-1994
APPLICATION NUMBER: FR 92/01064
FILING DATE: 31-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PS/01064
FILING DATE: 71-JAN-1992
RAPPLICATION NUMBER: PS/01064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: PA
COUNTRY: USA
ZIP: 19426
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY disk
COMPUTER: MacIntosh
OPERATING SYSTEM: System 7
                                                                                            STREET: 1840 DeHavilland D
CITY: Thousand Oaks
STATE: California
COUTRY: U.S.
ZIP: 91320-1789
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
TITLE OF INVENTION: Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 609 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AHKSEVAHRFK 11
                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 500 m. CITY: Collegeville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               unknown
                                                                       ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCT-US95-04075-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
US-08-797-689-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 58; DB 4; Length 609; 100.0%; Pred. No. 0.0042; Ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 58; DB 1; Length 609; 100.0%; Pred. No. 0.0042;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application PC/TUS9504075
GENERAL INFORMATION:
APPLICANT: AMGEN INC.
TITLE OF INVENTION: Afamin: A Human Serum Albumin-Like
                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOSXMS-DOS
SOFTWARE: Patentin Release#1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,037
FILING DATE: 03-MAY-1995
CLASSIFICATION: 435
ATTONEY/AGENT INPORMATION:
NAME: DIG1910, Frank S.
REGISTRATION NUMBER: 31,346
REFERENCE/DOCKET NUMBER: 31,346
REGISTRATION NUMBER: 31,466
REFERENCE/DOCKET NUMBER: 31,346
RELESPACE (516) 74.2-436
TELEFRAX: (516) 74.2-436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2. Application US/08897956A
Patent No. 6423512
GENERAL INFORMATION:
APPLICANT: Mary Ellen Digan
APPLICANT: Philip Lake
APPLICANT: Philip Lake
APPLICANT: Philip Lake
TITLE OF INVENTION: Fusion Polypeptides
FILE REFERENCE: 600-7244/CPA
CURRENT APPLICATION NUMBER: US/08/897,956A
CURRENT FILING DATE: 1997-07-21
PRIOR APPLICATION NUMBER: 60/022,689
PRIOR FILING DATE: 1996-07-26
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 100.0%; Pred. No. 0.0
Matches 11; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-433-037-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1111111111
26 AHKSEVAHRFK 36
                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-08-897-956A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-897-956A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCT-US95-04075-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 2
LENGTH: 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
```

g ð

ð පු

```
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                  RESULT 15
US-08-256-938-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-256-938-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGIH:
                                                                     g
                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2, Application US/08256938

Batent No. 5655863

GENERAL INFORMATION:
APPLICANT: Yeh, Patrice
TITLE OF INVENTION: OCLONY STIMULATING ACTIVITY, PREPARATION THEREOF AND
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING SAID POLYPEPTIDES
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rhone-Poulenc Rorer Inc.
STREET: 500 Arcola Road, 3C43
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 58; DB 2; Length 610; Best Local Similarity 100.0%; Pred. No. 0.0042; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 783;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 58; DB 1; Length 78
Best Local Similarity 100.0%; Pred. No. 0.0055;
Matches 11; Conservative 0; Mismatches 0; Indels
FILING DATE: 28-JAN-1993
ATTORNEY/AGENT INFORMATION:
NAME: Smith Ph.D., Julie K.
REGISTRATION NUMBER: P-38,619
REBERENCE/DOCKET NUMBER: ST92006-US
FELECOMUNICATION INFORMATION:
TELEPHONE: (610) 454-3808
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 610 amino acids
TYPE: amino acid
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 19426
ZONFUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Macintosh
COPERATING SYSTEM: System 7.1
SOFTWARE: Word 5.0 (Patentin)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 92/01065
FILLING DATE: 31-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: GOOdman, ROSAUNA
REGISTRATION NUMBER: 37,534
REFERENCE/DOCKET NUMBER: 5792007-1
TELEPHONE: (610) 454-3817
TELEPHONE: (610) 454-3817
TELEPHONE: (610) 454-3808
: INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : 783 amino acids
amino acid
                                                                                                                                                                                                                                                                                     ; MOLECULE TYPE: protein US-08-797-689-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1111111111
26 AHKSEVAHRFK 36
                                                                                                                                                                                                                                                                                                                                                                                                                              1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; MOLECULE TYPE: protein US-08-256-938-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Collegeville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-256-938-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
GENERAL INFORMATION:
APPLICANT: Yeh, Patrice
APPLICANT: Yeh, Patrice
TITLE OF INVENTION: COLONY STIMULATING ACTIVITY, PREPARATION THEREOF AND
TITLE OF INVENTION: COLONY STIMULATING ACTIVITY, PREPARATION THEREOF AND
TITLE OF INVENTION: PHARMACEUTICAL COMPOSITIONS CONTAINING SAID POLYPEPTIDES
NUMBER OF SEQUENCES:
ADDRESSEE: Rhone-Poulenc Rorer Inc.
STREET: 500 Arcola Road, 3C43
CITY: Collegeville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 58; DB 1; Length 787; 100.0%; Pred. No. 0.0056; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: FR 92/01065;
FILING DATE: 31-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: GOOGHMAN: ROSAND:
RECISTRATION NUMBER: 32,534
REFERENCE/DOCKET NUMBER: ST92007-US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Macintosh
OPERATING SYSTEM: System 7.1
SOFTWARE: Word 5.0 (Patentin)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/256,938
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Search completed: August 29, 2003, 14:30:04 Job time : 30 secs
                                                                                                                                      Sequence 4, Application US/08256938
Patent No. 5665863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (610) 454-3817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (610) 454-3808
INFORMATION FOR SEQ ID NO: 4
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : 787 amino acids
amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ouery, Match 100.
Best Local Similarity 100.
Matches 11; Conservative
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AHKSEVAHRFK 11
```

us-09-845-726a-1_copy_2_12.rag

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

OM protein - protein search, using sw model

August 29, 2003, 14:13:44; Search time 82 Seconds (without alignments) 21.293 Million cell updates/sec Run on:

US-09-845-726A-1_COPY_2_12 58 Perfect score: Title:

1 AHKSEVAHRFK 11 Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

1107863 seqs, 158726573 residues Searched:

Total number of hits satisfying chosen parameters:

1107863

length: 0 length: 2000000000 Minimum DB seq Maximum DB seq

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

A_Geneseq_19Jun03:* Database :

/SIDS1/gcgdata/geneseq/genesegp-emb1/AA1980.

/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1984.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1986.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*
/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*

/SIDS1/gcgdata/geneseq/geneseqp-embl/AA1991.DAT /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT

/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1994.DAT: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1992.DAT: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1995.DAT: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1996.DAT: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1993.DAT

/SIDS1/gcgdata/geneseq/genesegp-emb1/AA2001.DAT: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1999.DAT: /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1998.DAT /SIDS1/gcgdata/geneseq/geneseqp-embl/AA2002.DAT /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1997

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2003.DAT:

		æ			SUMMARIES	
Result No.	Score	Query Match	Query Match Length DB ID	DB	ID	Description
-	58	100.0	11	22	AAB74368	Reactive oxvgen sp
7	58	100.0	11	23		Human reactive oxv
m	58	100.0	11	24	ABG75656	Congestive heart f
4	58	100.0	12	22	AAB74367	Reactive oxygen sp
ហ	58	100.0	12	22	AAB74370	Reactive oxygen sp
9	58	100.0	12	23	AAE14801	Human reactive oxv
7	58	100.0	12	23	AAE14804	Human reactive oxv
80	58	100.0	12	24	ABB99709	Biopolymer marker
đ	28	100.0	13	19	AAW74538	Human Serum albumi

Congestive heart f Human albumin epit Human serum albumi Serum albumin insu Human polypeptide Human polypeptide	numan polypeptide Human polypeptide Sequence encoded b Novel human secret Human polypeptide Novel human secret	codon- human albumi -MSH co -MSH co	ISH ISH ISH INMA INMA	N-terminal human s N-terminal human s N-terminal human secret N-terminal human secret Novel human secret Mature human secret Mature human serum Sequence of mature Mature human serum
ABG75657 AAB12462 ABG75942 ABU09223 AAO11631 AAO02642 AAO11632	AAO02434 AAP30004 AAU29925 AAO12088 AAU29875 AAO17048	AAY83947 AAU29874 AAO17051 AAO16984 AAO16985 AAO16986	AAO16988 AAO16988 AAO16989 AAU29575 AAU29581 AAR14178 AAR14178	AAP90389 AAP90391 AAP90391 AAP90392 AAP90392 AAP93344 AAP90388
4444666		233325	100000000000000000000000000000000000000	100 100 100 100 100
13 26 28 113 116	133 133 193 195	204 236 241 242 242	22222222222222222222222222222222222222	388 390 390 550 588 585 585
100.0 1000.0 1000.0 1000.0	000000000000000000000000000000000000000	0.000.000000000000000000000000000000000	1000.0000000000000000000000000000000000	
	, v,	2 2 2 2 2 2 2		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
10 11 12 14 15 16	222 233 23	24 25 27 28 29	9 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

ALIGNMENTS

AAB74368 standard; peptide; 11 AA AAB74368

02-JUL-2001 (first entry)

Reactive oxygen species inhibitory peptide #4.

ROS; reactive oxygen species; metal binding; ischemia; neurodegerative. $\label{eq:local_local} I$

Synthetic.

WO200125265-A1.

29-SEP-2000; 2000WO-US26952

12-APR-2001.

01-OCT-1999; 99US-0157404. 13-JUN-2000; 2000US-0211078.

BAR-OR D.
CURTIS C G.
LAU E.
RAO N K R. (BARO/) (CURT/) (LAUE/) (RAON/) (WINK/)

CROOK W M. CR00/)

Lau E, Rao NKR, Winkler JV, Crook WM; Curtis CG, Bar-Or D,

```
qq
ŏ
                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New method for the inhibition of angiogenesis and the treatment of angiogenic disease, sepsis, and a disease involving acidosis, comprises the administration of a specified peptide or its salt -
                                                                                                          The present invention relates to metal binding peptides that prevent damage by reactive oxygen. The peptides may be used for reperfusing an ischemic tissue or organ with cerebral or cardiovascular ischemia, for treating neurological trauma and for neurodegenerative disease. The present sequence is a reactive oxygen species inhibitory peptide.
                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  Reactive oxygen species; ROS; metal-binding peptide; angiogenesis; embryo implantation; endometriosis; tumour; hypertrophy; psoriasis; connective tissue disorder; ocular angiogenic disease; polyposis; cardiovascular disease; cerebral vascular disease; immune disorder; sepsis; obesity; actidosis; arthritis; asthma; autofimmune disease; cancer: cystic fibrosis; atthritis; asthma; autofimmune disease; inflammation; inflammatory bowel disease; neurological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       invention relates to a method for reducing molecular, cellular tissue damage done by reactive oxygen species (ROS) and also
                                                                                                                                                                                                                                                                                                                                                                                              Human reactive oxygen species generation inhibiting peptide #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rao NKR, Winkler JV, Crook WM;
                                                                                                                                                                                                                            ó
                                 Metal binding peptide compounds prevent damage by reactive ox species in animal organs and tissues, useful for reperfusion, transplantation and treating e.g. ischemia, neurological and
                                                                                                                                                                                                    Length 11;
                                                                                                                                                                                                                            Indels
                                                                                                                                                                                          100.0%; Score 58; DB 22;
100.0%; Pred. No. 7.2e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  multiple sclerosis; pancreatitis; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 10; Page 56; 129pp; English.
                                                                                        Example 10; Page 43; 124pp; English.
                                                                                                                                                                                                                                                                                                                              AAE14802 standard; peptide; 11 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lau E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-FEB-2001; 2001US-268558P.
22-MAR-2001; 2001US-0816679.
04-APR-2001; 2001US-281648P.
11-APR-2001; 2001US-283507P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DMIB-) DMI BIOSCIENCES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-FEB-2002; 2002WO-US04275
                                                                                                                                                                                                                                                                                                                                                                         24-FEB-2003 (first entry)
                                                                                                                                                                                                                             11; Conservative
                                                                   cardiovascular diseases
                                                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                              1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Curtis CG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-691590/74.
          WPI; 2001-328322/34.
                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                               11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200264620-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bar-Or D,
                                                                                                                                                                                                                                                                                                                                                    AAE14802;
                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The
                                                                                                                                                                                                                                                                                                                  AAE14802
                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                        셤
```

```
cc reducing concentration of a metal ion in an animal using specific metal-binding peptides and their derivatives that bind metal ions.

CC The compounds of the invention are useful for inhibiting angiogenesis (including required for embryo implantation e.g. in bendometriosis), and for treating angiogenic diseases, such as tumour (preferably a benign tumour), tumour metastasis, pypertrophy, connective tissue disorder, vascular disease, polyposis, obesity, immune disorder, sepsis, and a disease or condition involving acidosis. The compounds are also useful in the treatment of ARDS, aging, AIDS, artherosclerosis (hypertension, senility and impotence), arthritis, asthma, autoimmune diseases, cancer, chronic granulomatous disease, cirrhosis, colitis, Crohn's cancer, chronic granulomatous disease, cirrhosis, colitis, Crohn's (disease, cystic fibrosis, (meuro)degenerative diseases, diabetes (diabetic retinopathy, renal disease, impotence and peripheral vascular disease), eye diseases, emphysema, head and traumatic brain injury, ce hepatitis C, infertility, inflammation, inflammatory bowel diseases, compliantly inflammation, inflammatory bowel diseases, compliants, peripheral vascular diseases, pulmonary embolism, reperfusion, scleroderma, sepsis, shock, cissue damage, toxic reactitis, peripheral vascular diseases, this damage, toxic reactions (e.g. poisoning (herbicide, transition metal, carbon monoxide, and antibiotic toxicity). The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel biopolymer marker such as serum albumin having specific molecular weight, useful in indicating disease state such as congestive heart failure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 58; DB 23; Length 11; 100.0%; Pred. No. 7.2e-05; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Biopolymer marker; serum albumin; disease specific marker; congestive heart failure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yantha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Congestive heart failure disease specific marker #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vrees T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stanton EB, Thatcher B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABG75656 standard; Peptide; 11 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-APR-2001; 2001US-0845726.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-APR-2001; 2001US-084572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oxygen species (ROS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 20$3-246641/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MARS/) MARSHALL J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (JACK/) JACKOWSKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANTON E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2002160417-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YANTHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VREES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jackowski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABG75656;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Marshall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VREE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YANT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (THAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
ABG75656
```

Gaps

ö

Indels

```
The present invention relates to metal binding peptides that prevent damage by reactive oxygen. The peptides may be used for reperfusing an ischemic tissue or organ with cerebral or cardiovascular ischemia, for treating neurological trauma and for neurodegenerative disease. The present sequence is a reactive oxygen species inhibitory peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Metal binding peptide compounds prevent damage by reactive oxygen species in animal organs and tissues, useful for reperfusion transplantation and treating e.g. ischemia, neurological and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 58; DB 22; Length 12;
11arity 100.0%; Pred. No. 8e-05;
Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                              ROS; reactive oxygen species; metal binding; ischemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Winkler JV,
                                                               0;
                                     DB 22;
                                     Score 58; DB 22,
Pred. No. 8e-05;
                                                                                                                                                                                                                                                                     Reactive oxygen species inhibitory peptide/#6.
                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rao NKR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 10; Page 43; 124pp; English.
                                                                                                                                                                                     AAB74370 standard; peptide; 12 AA.
                                                                 ;
                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ы
ы
                                                                                                                                                                                                                                                                                                                                                                                                                    29-SEP-2000; 2000WO-US26952.
                                                                                                                                                                                                                                                                                                                                                                                                                                             01-OCT-1999; 99US-0157404
13-JUN-2000; 2000US-0211078
                                                                                                                                                                                                                                           (first entry)
                                                                 11; Conservative
                                                                                                          2 AHKSEVAHRFK 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cardiovascular diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Curtis CG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURTIS C G.
LAU E.
RAO N K R.
WINKLER J V.
CROOK W M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-328322/34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 11; Conserv
                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12 AA;
             12 AA;
                                                                                                                                                                                                                                                                                                            neurodegerative.
                                                                                                                                                                                                                                                                                                                                                                 WO200125265-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BAR-OR
                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-1999;
                                                                                                                                                                                                                                          02-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                          12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bar-Or D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence
                                                                                                                                                                                                                 AAB74370;
               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BARO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RAON/)
(WINK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CR00/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAUE/
                                                                  Matches
                                                                                                                                                           RESULT 5
AAB74370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
AAE14801
 XX
So
                                                                                                                     g
                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                         ö
                                  The invention relates to a biopolymer marker such as serum albumin having a molecular weight of about 1424 daltons, useful in indicating at least one particular disease state. The biopolymer marker is useful for indicating at least one particular disease state such as congestive heart failure and as an antigen in immunoassays for the detection of those individuals suffering from the disease known to be evidenced by the marker sequence. The biopolymer marker rapidly and accurately diagnoses a disease state such as congestive heart failure and allows physicians to identify asymptomatic patients before they develop the disease state. This sequence represents a congestive heart failure disease specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to metal binding peptides that prevent damage by reactive oxygen. The peptides may be used for reperfusing an ischemic tissue or organ with cerebral or cardiovascular ischemia, for treating neurological trauma and for neurodegenerative disease. The present sequence is a reactive oxygen species inhibitory peptide.
                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Metal binding peptide compounds prevent damage by reactive oxygen species in animal organs and tissues, useful for reperfusion, transplantation and treating e.g. ischemia, neurological and
                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Crook WM;
                                                                                                                                                                                                                               Length 11;
                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    binding; ischemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Winkler JV,
                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                            Score 58; DB 24;
Pred. No. 7.2e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Reactive oxygen species inhibitory péptide #3.
                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rao NKR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 10; Page 43; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROS; reactive oxygen species; metal
                                                                                                                                                                                                                                                                                                                                                                         AAB74367 standard; peptide; 12 AA.
                                                                                                                                                                                                                                                        ;
0
           Claim 1; Page 7; 10pp; English.
                                                                                                                                                                                                                            ch 100.0%;
1 Similarity 100.0%;
11; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lau E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-SEP-2000; 2000WO-US26#52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-1999; 99US-0157404.
                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                              1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cardiovascular diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Curtis CG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-328322/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BAR-OR D.
CURTIS C G.
                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RAO N K R.
WINKLER
CROOK W M.
                                                                                                                                                                                                   11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neurodegerative.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200125265-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                               02-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bar-Or D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                      AAB74367;
                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BARO/)
(CÚRT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RAON/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CROO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LAUE/
                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                    RESULT
q
                                                                                                                                                                                                                                                                                                                                                                                          õ
```

Crook WM;

ö

Gaps

AAE14804 standard; peptide; 12 AA.

AAE14804

a

Ω

```
The invention relates to a method for reducing molecular, cellular and tissue damage done by reactive oxygen species (ROS) and also reducing concentration of a metal ign in an animal using specific metal-binding peptides and their defivatives that bind metal ions.

Cometal-binding peptides and their defivatives that bind metal ions.

The compounds of the invention are/useful for inhibiting angiogenesis for embryo implantation e.g. in endometriosis), and for treating angiogenic disease, such as tumour (preferably a benign tumour), tumour metastasis, hypertrophy, connective tissue disorder, tumour metastasis, phyertrophy, connective tissue disorder, conscular disease, polyposis, obesity, immune disorder, sepsis, and a disease or condition involving acidosis. The compounds are also useful in senility and impotence), arthritis, asthma, autoimmune diseases, cancer, chronic granulomatous disease, cirrhosis, colitis, crohn's cancer, chronic granulomatous disease, impotence and peripheral vascular disease, eye diseases, emphysema, head and traumatic brain injury, companies, ischaemia, neoplastic diseases, neurological disease, continged exists, ischaemia, neoplastic diseases, neurological disease, prion disease, pulmonary embolism, reperfusion, scleroderma, sepsis, shock, tissue damage, toxic reactions (e.g. poisoning (herbicide, transition continged exists), control experises and antibiotic toxicity). The present control 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sis and the treatment of involving acidosis, comprises
                                                                                                                                                                                           Reactive oxygen species; ROS; metal-binding peptide; angiogenesis; embryo implantation; endometriosis; tumour; hypertrophy; psoriasis; connective tissue disorder; ocular angiogenic disease; polyposis; cardiovascular disease; cerebral vascular disease; immune disorder; sepsis; obesity; acidosis; arthritis; asthma; autoimmune disease; cancer; cystic fibrosis; diabetes; hepatitis C; infertility; inflammation; inflammatory bowel disease; neurological disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Crook WM;
                                                                                                                                                  Human reactive oxygen species generation inhibiting peptide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New method for the inhibition of angiogenessis and the trangiogenic disease, sepsis, and a disease involving acid the administration of a specified peptide or its salt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Winkler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rao NKR,
                                                                                                                                                                                                                                                                                                                                                                            multiple sclerosis; pancreatitis; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 10; Page 56; 129pp; English
AAE14801 standard; peptide; 12 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lau E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-0816679.
2001US-281648P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-FEB-2002; 2002WO-US04275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001US-283507P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DMIB-) DMI BIOSCIENCES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001US-268558P
                                                                                              24-FEB-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bar-Or D, Curtis CG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-691590/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oxygen species (ROS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200264620-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAR-2001;
04-APR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-APR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-AUG-2002.
                                                   AAE14801;
```

```
and tissue damage done by reactive oxygen species (ROS) and also concentration of a metal ion in an animal using specific reducing concentration of a metal ion in an animal using specific metal-binding peptides and their derivatives that bind metal ions.

The compounds of the invention are useful for inhibiting angiogenesis (including required for embryo implantation e.g. in endometriosis), and for treating angiogenic diseases, such as tumour (preferably a benign tumour), tumour metastasis, hypertrophy, connective tissue disorder. Speciasis, coular angiogenic disease, cardiovascular disease, cerebral vascular disease, polyposis, obesity, immune disorder, sepsis, and a disease or condition involving acidosis. The compounds are also useful in the treatment of ARDS, aging, ALDS, artherosclerosis (hypertension, senility and impotence), arthritis, asthma, autoimmune diseases, cancer, chronic granulomatous disease, cirrhosis, colitis, Crohn's disease, cystic fibrosis, (neuro)degenerative diseases, diabetes (diabetic retinopathy, renal disease, impotence and peripheral vascular disease), eye diseases, emphysema, head and traumatic brain injury, hepatitis C, infertility, inflammation, inflammatory bowel disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New method for the inhibition of angiogenesis and the treatment of angiogenic disease, sepsis, and a disease involving acidosis, comprises the administration of a specified peptide or its salt -
                                                                                                                                                                                                       disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a method for reducing molecular, cellular
                                                                                                                                      Reactive oxygen species; ROS; metal-binding peptide; angiogenesis; embryo implantation; endometriosis; tumour; hypertrophy; psoriasis connective tissue disorder; ocular angiogenic disease; polyposis; cardiovascular disease; terebral vascular disease; immune disorder sepsis; obesity; acidosis; arthritis; asthma; autoimmune disorder ancer; cystic fibrosis; diabetes; hepatitis C; infertility; inflammaton; bowel disease; neurological disease; multiple sclerosis; pancreatitis; human.
                                                                                                                                               angiogenesis;
                                                                                                      Human reactive oxygen species generation inhibiting peptide #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Crook WM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rao NKR, Winkler JV,
                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "N-terminal acety/ated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 10; Page 57; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lau E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-FEB-2002; 2002WO-US04275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-FEB-2001; 2001US-268558P.
22-WAR-2001; 2001US-0816679,
04-APR-2001; 2001US-281648P,
11-APR-2001; 2001US-283507P.
                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DMIB-) DMI BIOSCIENCES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Curtis CG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-691590/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W0200264620-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                 Modified-site
                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                            24-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bar-Or D,
                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                   AAE14804;
```

ő

Gaps

; 0

100.0%; Score 58; DB 23; Length 12; 100.0%; Pred. No. 8e-05; ive 0; Mismatches 0; Indels

Conservative

11;

Matches

Query Match Best Local Similarity

12 AA;

Sequence

(first entry)

888888888

g

ò

```
Human; zonula occludens toxin receptor; ZOT receptor;
appoints, antagonist; toxin; anti-inflammatory drug; antibody;
gastrointestinal; inflammatory bowel disease; food allery;
protein loosing enteropathy; coeliac disease; adsorption enhancer;
              AAW74538 standard; peptide; 13 AA.
                                                                                                                                                                                                  fusion protein; serum albumin.
                                                                                                         Human serum albumin fragment.
                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                             W09837096-A1
                                                                                                                                                                                                                                                                                                                          18-FEB-1998;
                                                                           02-DEC-1998
                                                                                                                                                                                                                                                                                            27-AUG-1998
                                            AAW74538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABG75657
                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a biopolymer marker which is indicative of congestive heart failure. The biopolymer marker is used for evidencing and categorizing a disease state. It is used in an assay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New biopolymer marker for use in diagnostic assays for the detection or characterization of a particular disease state, especially congestive heart failure -
         multiple sclerosis, parcreditis, peripheral vascular disease, prion disease, pulmonary embolism, reperfusion, scleroderma, sepsis, shock, tissue damage, toxic reactions (e.g. poisoning (herbidide, transition metal, carbon monoxide, and antibiotic toxicity). The present sequence is a human peptide that inhibits generation of reactive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnostic kit and in diagnosing, determining risk-assessment, and identifying therapeutic avenues related to a disease state, such as congestive heart failure. Controlling the presence or absence of the biopolymer marker is used to regulate a disease state.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             14 =0907000 = 000 SM
                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
metastasis, ischaemia, neoplastic diseases, neurological diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                    ô
                                                                                                                                                    Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Marshall J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 24; Length 12
                                                                                                                                                            8e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                    Biopolymer marker indicative of congestive heart failure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                    DB 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Thatcher B, Vrees T, Yantha J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 58; DB 24; 100.0%; Pred. No. 8e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Biopolymer marker; congestive heart failure.
                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 · 0; Mismatches
                                                                                                                                                    100.0%; Score 58; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                       ABB99709 standard; peptide; 12 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 28; 28pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-APR-2001; 2001US-0846347.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-APR-2002; 2002WO-CA00611.
                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100.
nes 11; Conservative
                                                                                                                                                                                  11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SYNX-) SYN.X PHARMA INC
                                                                                                                                                                                                                                  1 AHKSEVAHRFK 11
                                                                                                                                                                                                                 1 AHKSEVAHRFK 11
                                                                                         oxygen species (ROS)
                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-111906/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12 AA;
                                                                                                                       12 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200288723-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jackowski G,
                                                                                                                                                                                                                                                                                                                                                                                    28-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-NOV-2002.
                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                     ABB99709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                    Query Match
                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                         ABB99709
                                                                                                                                                                                                                                                                                         RESULT
```

NAME OF THE PROPERTY OF THE PR

98WO-US02257.

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          This is the amino acid sequence of a fragment of the human serum albumin used in the method of the invention where human zonula occludes toxin (ZOT) receptor is used. The ZOT receptor is used as capture ligand in affinity assays for agonists and antagonists of the toxin. Antagonists of ZOT are specifically useful as capture lighamatory drugs in the treatment of gastrointestinal conditions that display an increased intestinal permeability, e.g. inflammatory bowel diseases, protein loosing enteropathy, food a lifammatory bowel diseases, protein loosing enteropathy, food inflammatory bowel diseases. Agonists of ZOT can rapidly open tight junctions in a reversible and reproducible manner and are useful as intestinal or nasal adsorption enhancers. The receptors are also useful for generating monoclonal or polychonal antibodies (using conventional techniques), and to purify ZOT and fusion proteins comprising ZOT by affinity chromatography.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                   New zonula occludens toxin receptors - for identifying receptor antagonists which can be used as anti-inflammatory drugs and agonists useful as intestinal/nasal adsorption enhancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Congestive heart failure disease specific marker #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 58; DB 19;
100.0%; Pred. No. 8.7e-05;
ive 0; Mismatchés 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABG75657 standard; Peptide; 13 AA
                                                                                                                                                                                                                                                                                                                                                                                           Example 7; Page 49; 68pp; English
                                                                                            (UYMA-) UNIV MARYLAND BALTIMORE.
98US-0024198.
97US-0803364.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AHKSEVAHRFK
                                                                                                                                                                                                           WPI; 1998-467493/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 AA;
17-FEB-1998;
20-FEB-1997;
                                                                                                                                                       Basano A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABG75657;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EX LX SX SX E
```

RESULT

à g

```
30-APR-2001; 2001US-0846328
                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABG75942;
                                                                                                                                                                                                                                                                                                                           Query Match
            Ношо
                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 12
  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                  δλ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ó
                                                                                                                                                                                                                                                                                                                                                            The invention relates to a biopolymer marker such as serum albumin having a molecular weight of about 1424 dailtons, useful in indicating at least one particular disease state. The biopolymer marker is useful for indicating at least one particular disease state such as congestive heart failure and as an antigen in immunoassays for the detection of those individuals suffering from the disease known to be evidenced by the marker sequence. The biopolymer marker rapidly and accurately diagnoses a disease state such as congestive heart failure and allows physicians to identify asymptomatic patients before they develop the disease state. This sequence represents a congestive heart failure disease specific
                                                                                                                                                                                                                                                                                                         Novel biopolymer marker such as serum albumin having specific molecular weight, useful in indicating disease state such as congestive heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Monoclonal antibody; hybridoma cell; immunoglobulin; IgG; fusion; human albumin; diabetic nephropathy; diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 13;
         Biopolymer marker; serum albumin; disease specific marker; congestive heart failure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                            Yantha
                                                                                                                                                                                                               \mathcal{O}^{\dagger}
                                                                          /note= "Residue is optionally absent"
                                                                                            /note= "Residue is optionally absent"
                                                                                                                                                                                                                                                           Ė
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 58; DB 24; 100.0%; Pred. No. 8.7e-05;
                                                                                                                                                                                                                                                           Vrees
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                           Thatcher B,
                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB12462 standard; Peptide; 20 AA.
                                                                                                                                                                                                                                                                                                                                             Disclosure; Fig 1; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human albumin epitope peptide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                      30-APR-2001; 2001US-0845726
                                                                                                                                                   30-APR-2001; 2001US-0845726
                                                                                                                                                                                                                                                           Stanton EB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12
                                                                                                                                                                                         JACKOWSKI G.
STANTON E B.
THATCHER B.
VREEREES T.
YANTHA J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AHKSEVAHREK
                                                                                                                                                                                                                                                                                     WPI; 2003-246641/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                   Misc-difference 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13 AA;
                                                                                                                                                                                                                                                                                                       Novel biopolymer
                                                                Misc-difference
                                                                                                              US2002160417-A1
                                                                                                                                                                                                                                                           Jackowski G,
                                     Unidentified
                                                                                                                                 31-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-OCT-2000
                                                                                                                                                                                                                                                                    Marshall J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB12462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                           failure
                                                                                                                                                                                                                     (VREE/)
(YANT/)
                                                                                                                                                                                          JACK/)
                                                                                                                                                                                                                                        (MARS/)
                                                                                                                                                                                                              THAT/)
                                                                                                                                                                                                   STAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB12462
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunoglobulin G (1gG) monoclonal antibody capable of rapid reaction with human albumin. The hybridoma cells are prepared by fusion of mammal mayeloma cells and spleen cells immunised with human serum albumin, and producing IgG monoclonal antibody which rapidly react with human albumin. The monoclonal antibody which rapidly react with human albumin. The monoclonal series can be used in the diagnosis of diabetic nephropathy. The present sequence represents a human albumin epitope peptide sequence which is used in an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                             Hybridoma cells for preparation of IgG monoclonal antibody capable of rapid reaction with human albumin for diagnosis of diabetic nephropathy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention describes hybridoma cells used for preparing an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Surface Enhanced Laser Desorption Ionization mass spectrometry; time-of-flight detection procedure; complement system disease; syndrome X; insulin resistance; hyperinsulinaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 58; DB 21; Length 20; 100.0%; Pred. No. 0.00014;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Specifically claimed in claim 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; serum albumin; biopolymer marker; SELDI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human serum albumin biopolymer marker peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Optionally absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Optionally absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ¥.
                                                                                                                                                                                                                                                                                      KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example; Fig 1; 11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABG75942 standard; peptide; 26
                                                                                                                                                                                                                                                                                   (TOYW ) TOYOTA CHUO KENKYUSHO (AISE ) AISIN SEIKI KK.
                                                                                                                                                                    98JP-0311677
                                                                                                                                                                                                                          98JP-0311677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100.
nes 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 AHKSEVAHRFK
                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-433935/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2002160531-A1
                                                  JP2000139460-A.
sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                          02-NOV-1998;
                                                                                                                                                                 02-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-OCT-2002.
                                                                                                           23-MAY-2000
```

H

Vrees

Yantha J,

Marshall J,

B,

Thatcher

Jackowski G,

WPI; 2003-361743/34.

```
A new blopolymer marker useful in indicating a particular disease state particularly insulin resistance
months self-
                                                                                                                                                                                                                                                                      The invention describes a biopolymer marker useful in indicating at least one particular disease state. Biopolymer markers are identified using Surface Enhanced Laser besorption Ionization (SELDI) mass spectrometry and timm-of-flight detection procedures. The markers are useful for indicating e.g. complement system diseases and syndrome X, characterised by the clustering of insulin resistance and hyperinsulinaemia. This is the amino acid sequence of a human serum albumin biopolymer marker useful for indicating insulin resistance.
                                                                                                                                                   Yantha J, Vrees T;
                                                                                                                                                   Thatcher B, Marshall J,
                                                                                                                                                                                                                                               Disclosure; Fig 1; 10pp; English.
                                      30-APR-2001; 2001US-0846328.
                                                                JACKOWSKI G.
THATCHER B.
MARSHALL J.
                                                                                                                                                                             WPI; 2003-246645/25.
                                                                                                                                                                                                                                                                                                                                                                                                  26 AA;
                                                                                                                       (VREE/) VREES T.
                                                                                                                                                   Jackowski G,
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                (JACK/)
(THAT/)
                                                                                            MARS/)
                                                                                                            (YANT/)
```

```
Human; insulin resistance; serum albumin; biopolymer marker; lipaemia;
                        Gaps
                                                                                                                                                                                                                         complement system disease; syndrome X; obesity; hyperinsulinaemia; glucose intolerance; blood coagulation abnormality; hyperuricaemia; albuminuria; kidney failure; stroke; hypertension; diabetes;
                      ö
  Length 26;
                     Indels
                                                                                                                                                                                      Serum albumin insulin resistance disease specific marker.
                                                                                                                                                                                                                                                                                                                         /note- "Specifically claimed in claim 1"
100.0%; Score 58; DB 24;
100.0%; Pred. No. 0.00019;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                     ABU09223 standard; peptide; 28 AA.
                                                                                                                                                                13-JUN-2003 (first entry)
           Local Similarity 100.
Les 11; Conservative
                                          1 AHKSEVAHRFK 11
                                                        3 AHKSEVAHRFK
                                                                                                                                                                                                                                                          heart failure
                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                            ABU09223;
 Query Match
                                                                                                                                                                                                                                                                                                                Region
                     Matches
                                                                                                 RESULT 13
                                                                                                          ABU09223
                                            ô
                                                               g
```

30-APR-2001; 2001US-0846329. 30-APR-2001; 2001US-0846329

S2002161177-A1

31-0CT-2002

(JACK/) JACKOWSKI G. (THAT/) THATCHER B. (MARS/) MARSHALL J. (YANT/) YANTHA J. (VREE/) VREES T.

```
ö
                                                                                                                                                                 The invention relates to a serum albumin biopolymer marker having a molecular weight of 2937 daltons which indicates at least one particular disease state. The bioploymer marker is useful for indicating at least one particular disease state. A second in the complement system and syndrome X such as obesity, hyperinsulnaemia, lipaemia, glucose intolerance, blood coagulation abnormalities, hypertrension, diabetes and heart failure. The biopolymer marker enables a diagnostician to gain the ability to characterise either the presence or absence of the disease state relative to recognition of the presence and/or the absence of the biopolymer. The present sequence represents amino acid sequence of the serum albumin insulin resistance disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; cytokine; cell proliferation; cell differentiation; gene therapy; vaccine; peptide therapy; stem cell growth factor; haematopoiesis; tissue growth factor; immunomodulatory; cancer; leukaemia; nervous system disorders; arthritis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                Serum albumin biopolymer marker having specific molecular weight indicates at least one particular disease state
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Isolated nucleic acids and polypeptides, useful for preventing diagnosing and treating e.g. leukaemia, inflammation and immune disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 20; SEQ ID NO 25523; 1399pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                AA011631 standard; Protein; 113 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human polypeptide SEQ ID NO 25523.
                                                                                                                                    Disclosure; Fig 1; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tang YT, Liu C, Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-FEB-2001; 2001WO-US04927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-FEB-2000; 2000US-0515126
18-MAY-2000; 2000US-0577409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 AHKSEVAHRFK 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-514838/56.
N-PSDB; AAI91562.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                 28 AA;
                                                                                                                                                                                                                                                                                                                                                                                 specific marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200164835-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA011631;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
AAO11631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCOUNTY OF THE PROPERTY OF T
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

ó

```
the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to broduction of other cytokines in other cell population or which may induce production of other cytokines in other cell populations. The polymothedides and polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, activity, tissue growth factor activity, hematopolesis regulating activity, tissue growth factor activity, immunomodulatory activity and activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and
                                                                                                                                                                                                            Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to human polynucleotides (AAI79941-AAI93841) and the encoded proteins (AA000010-AA013910) that exhibit activity elating to tyckthe, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The production of polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoiesis regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, cytokine; cell proliferation; cell differentiation; gene therapy;
vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
tissue growth factor; immunomodulatory; cancer; leukaemia;
nervous system disorders; arthritis; inflammation.
                  invention relates to human polynucleotides (AAI79941-AAI93841) and
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Isolated nucleic acids and polypeptides, useful for preventing diagnosing and treating e.g. leukaemia, inflammation and immune disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 20; SEQ ID NO 16534; 1399pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                        100.0%; Score 58; DB 22; Length 113; 100.0%; Pred. No. 0.001; 1ve 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA002642 standard; Protein; 116 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human polypeptide SEQ ID NO 16534.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tang YT, Liu C, Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-FEB-2000; 2000US-0515126.
18-MAY-2000; 2000US-0577409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-FEB-2001; 2001WO-US04927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                            1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                                                                                                                                   30 AHKSEVAHRFK 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-514838/56.
N-PSDB; AAI82573.
                                                                                                                                                                                                                                                                                        113 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200164835-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-SEP-2001.
                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAO02642;
                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAO02642
g
                                                                                                                                                                                                                                                                                                                                                                                          à
```

```
ö
                                                                                           the printed
activity, tissue growth factor activity, immunomodulatory activity and activin/inhibin activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and
                                                                                       part of the printed directly from WIPO
                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                               ö
                                                                                                                                                                                            Ouery Match 100.0%; Score 58; DB 22; Length 116; Best Local Similarity 100.0%; Pred. No. 0.0011; Matches 11; Conservative 0; Mismatches 0; Indels (
                                                                             Note: The sequence data for this patent did not form specification, but was obtained in electronic format at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                   Search completed: August 29, 2003, 14:26:28 Job time : 84 secs
                                                                                                                                                                                                                                                                         1 AHKSEVAHRFK 11
                                                                                                                                                                                                                                                                                                  116 AA;
                                                             inflammation.
                                                                                                                                                             Seguence
  88888888%8
                                                                                                                                                                                                                                                                         ò
```